

Physical Activity & Exercise in Chronic Kidney Disease

IRISH KIDNEY ASSOCIATION WEBINAR- WORLD KIDNEY DAY

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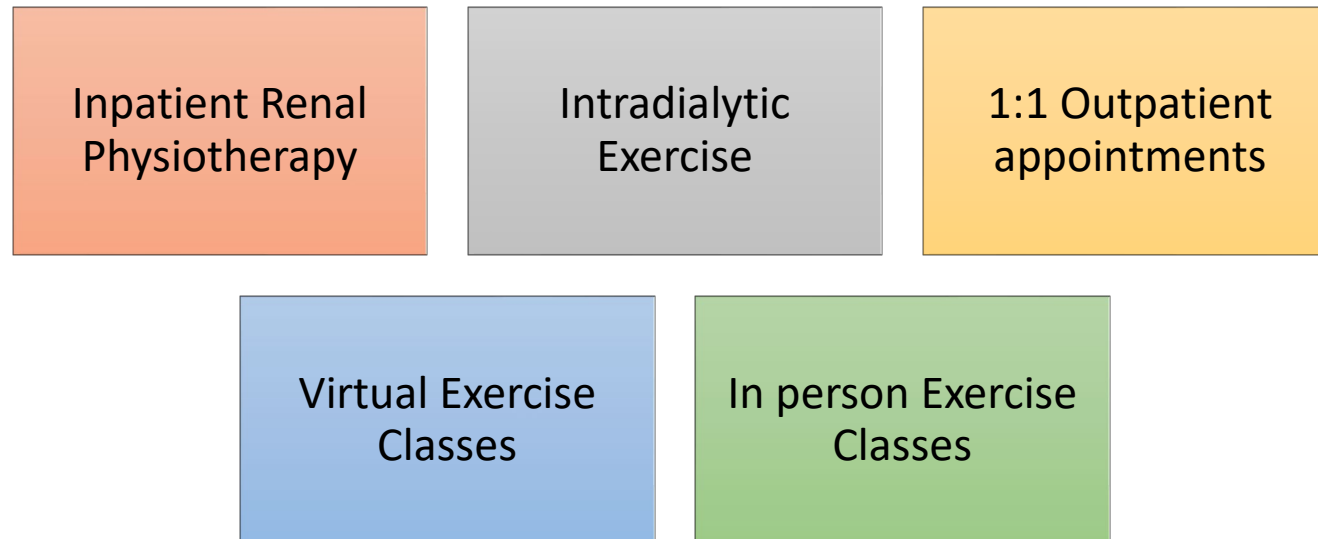
SENIOR RENAL PHYSIOTHERAPISTS IN TALLAGHT UNIVERSITY HOSPITAL

13TH MARCH 2025



Role of a Physiotherapist within Renal Team

- Screening and Assessment
- Education & Promotion of Physical Activity and Healthy Lifestyle
- Intervention based on Individualised Assessment
- Symptom Management
- MDT based interventions



What is Exercise?

“Exercise is a planned, structured and repetitive bodily movement done with a goal to improve physical fitness.”

- Engaging in physical activity and increasing the heart rate beyond resting levels

You may feel you are active through your job or daily routine...**BUT** for exercise to be effective it's important that this is sustained over a longer time period



Benefits of Exercise in Kidney Disease

Improves Blood
Pressure

Improves Physical
Function

Improves
Cardiovascular
Health

Improves Mental
well-being

Improves Quality of
Life

Helps to maintain a
healthy weight

Improves bone
density, muscle
mass, strength &
balance

Helps in control of
diabetes

What is Recommended?

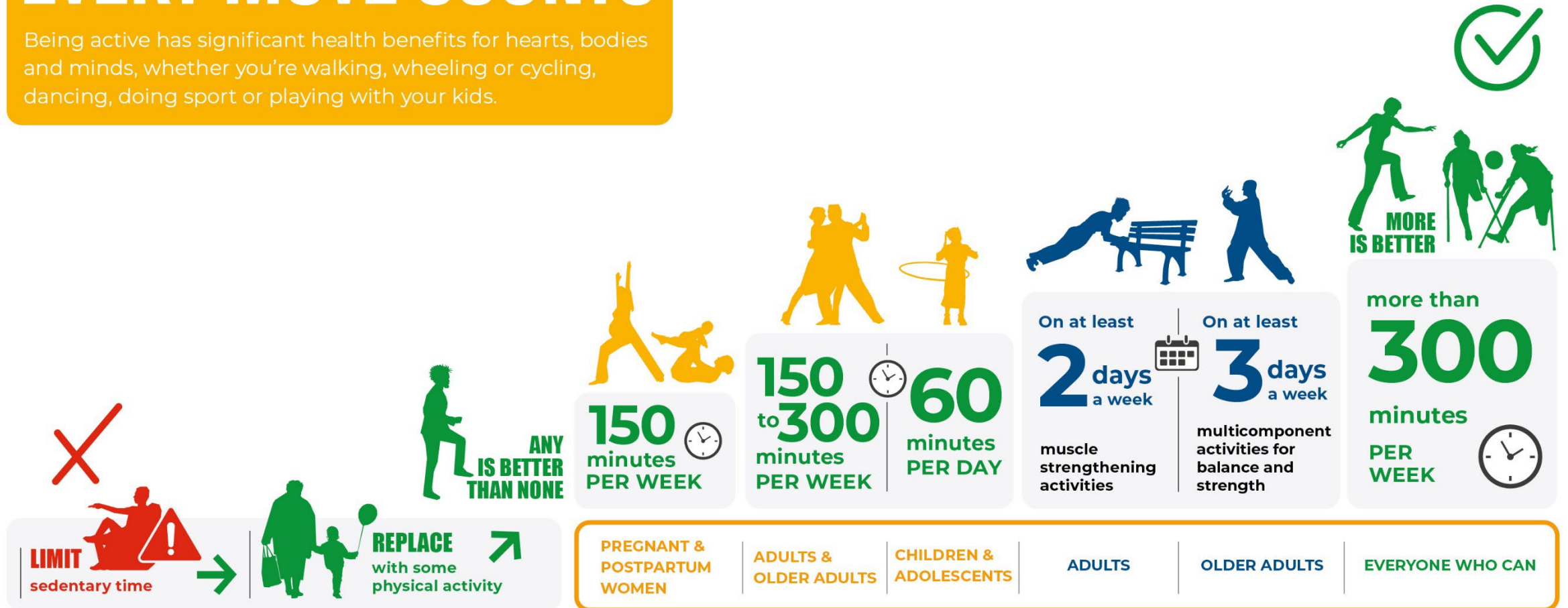


- 150 Minutes of Moderate Intensity Exercise per week
- Combination of Aerobic, Strengthening and Balance Exercises
- All movement is good movement!
- Exercise can be modified to be safe and enjoyable for all.

World Health Organisation Guidelines

EVERY MOVE COUNTS

Being active has significant health benefits for hearts, bodies and minds, whether you're walking, wheeling or cycling, dancing, doing sport or playing with your kids.



Aerobic Exercise



- Any activity that uses large muscle groups, can be maintained continuously and is rhythmic in nature
- Strengthens the heart & improves its pumping effect
- Improves “fitness” over time
- Improves use of oxygen in muscles
- There are a lot of different types of aerobic exercises. Some of the most common include:
 - Walking or jogging.
 - Cycling
 - Cardio equipment.
 - Swimming.
- Aim for **30 mins of moderate intensity** activity on 5 days of the week
 - Can be broken down to shorter bouts of exercise – should last at least 10 minutes.

Perceived Exertion Rating	Description of Exertion
6	No exertion. Sitting & resting
7	Extremely light
8	
9	Very light
10	
11	Light
12	
13	Somewhat hard
14	
15	Hard
16	
17	Very hard
18	
19	Extremely hard
20	Maximal exertion

BORG SCALE

You can use the BORG scale to help you to understand when you are exercising at a moderate intensity feels like.

MODERATE intensity =
BORG 12-16 (yellow)



Resistance/Strength Training

- Resistance training refers to exercise that involve using **external load** to challenge our muscles in a way that increases their **strength**.
- External load can be in the form of weights, stretching resistance bands, weighted objects/weights, carrying groceries or using the force of gravity to create resistance.
- Aim to complete strength training 2 times a week
- WHY?- We rely on having strong muscles to do so many things in our daily lives
e.g. lifting plates onto shelves, Lifting the washing basket, Mowing the lawn. Hoovering, Taking the bins out , Lifting children / grandchildren, Carrying shopping bags, Carrying dialysis Bags



Safety while exercising

Always listen to your body. If you have any of the following signs, stop, rest & if symptoms do not relieve seek medical attention:

- Dizziness
 - Faintness
 - Excessive shortness of breath
 - Chest pain/arm pain
-
- **Warm-Up & Cool Down to prevent injuries.**
 - **Stay Hydrated within fluid limits.**

Exercise & Dialysis



Benefits of Intradialytic Exercise



Reduces fatigue severity



Improves sleep quality



Safe & Effective



Efficacy of Dialysis



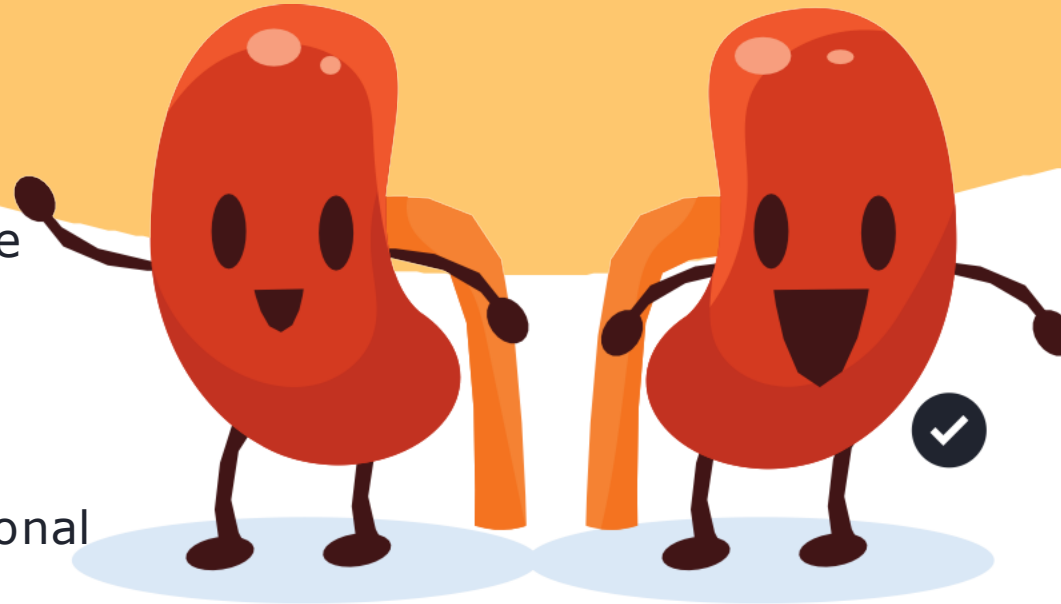
Improve physical functional



Improves Mental Health



Improved Cardiovascular Health

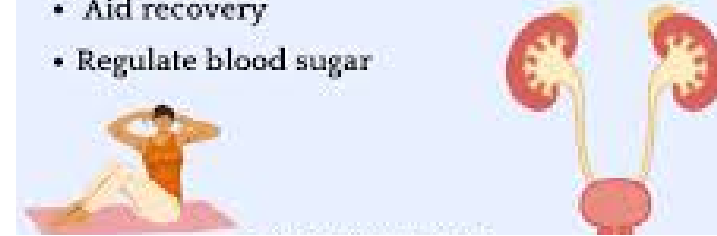


Exercise post Transplant

- Exercise Journey does not stop after transplant
 - Keeping active is very important
 - In the first few weeks, you should try to walk a little every day
 - As you recover, you can do more. If your recovery is going well- after 6-8 weeks, you will usually be encouraged to start moderate exercise.
-
- Pre Transplant: BMI, maintain fitness
 - Post Transplant: Weight management, Diabetes (NODAT)
 - Stay consistent to improve long-term outcomes.

REASONS TO EXERCISE AFTER KIDNEY TRANSPLANT

- Improve cardiovascular function
- Reduce the negative side effects of immunosuppressant drugs
- Improve physical function
- Regulate blood pressure
- Aid recovery
- Regulate blood sugar



Physical Activity Readiness Questionnaire

1. Do you have a heart condition and should only do physical activity recommended by a physician?

☐ Y

☐ N

2. When you do physical activity, do you feel pain in your chest?

☐ Y

☐ N

3. When you were not doing physical activity, have you had chest pain in the past month?

☐ Y

☐ N

4. Do you ever lose consciousness or do you lose your balance because of dizziness?

☐ Y

☐ N

5. Do you have a joint or bone problem that may be made worse by a change in your physical activity?

☐ Y

☐ N

6. Is a physician currently prescribing medications for your blood pressure or heart condition?

☐ Y

☐ N

7. Are you pregnant?

☐ Y

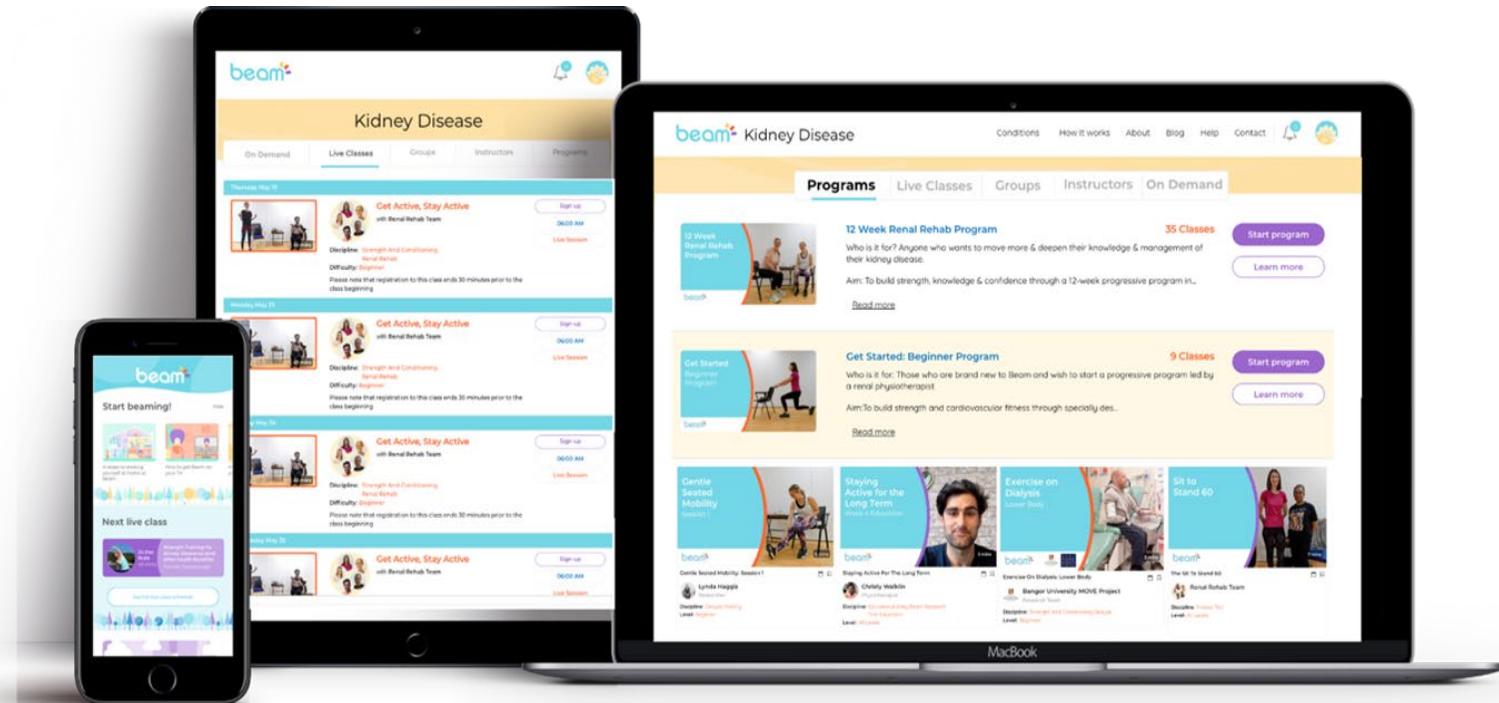
☐ N

8. Do you know of any other reason you should not exercise or increase your physical activity?

☐ Y

☐ N

If you answer yes to any of these questions please consult a healthcare professional prior to starting exercise – but doesn't mean you are not safe to exercise



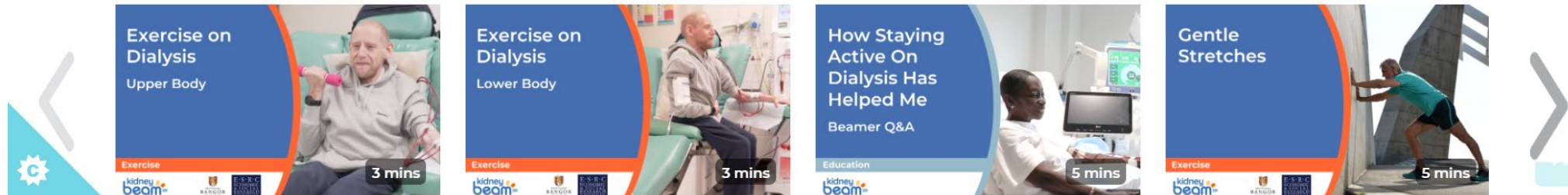
A kidney-specific exercise & lifestyle management app designed to **support, empower and improve the lives of people living with chronic kidney disease**



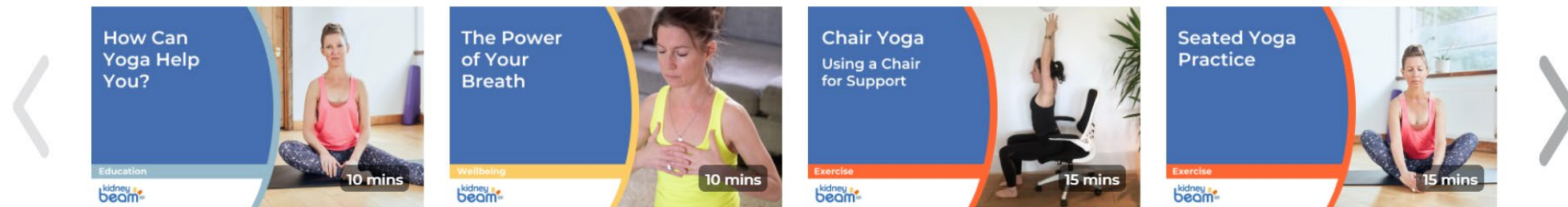
Renal Rehab



Exercise on Dialysis



Yoga





Tuesday May 07



Get Active, Stay Active

with Renal Rehab Team

Discipline: Strength And Conditioning, Renal Rehab

Difficulty: All Levels

Please note that registration to this class ends 30 minutes prior to the class beginning

Sign up

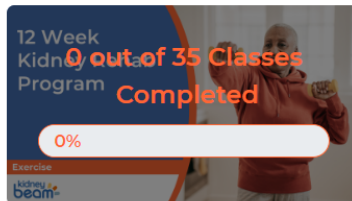
10:00 AM

Live Session

Wednesday May 08



Sort by : Default ▾



12 Week Kidney Rehab Programme

35 Classes

Who is it for? Anyone who wants to move more & deepen their knowledge & management of their kidney disease.

Aim: To build strength, knowledge & confidence through a 12-week progressive program in...

[Read more](#)

Start next class

[Learn more](#)



Get Started: Beginner Programme

9 Classes

Who is it for? Those who are brand new to Beam and wish to start a progressive programme led by a renal physiotherapist.

Aim: To build strength and cardiovascular fitness through specially d...

[Read more](#)

Start programme

[Learn more](#)

Community Resources for Patients



- Community Based Supervised Exercise Classes for people with any long term illness
- Partially Funded by the HSE
- Over 30 centres nationwide with further planned
- Accept referrals from any healthcare professional
- www.exwell.ie



**Transplant Sport
Ireland**

- Open to all ages.
- Dialysis Patients or Transplant Recipients
- Swimming, Football, Ten Pin Bowling, Athletics (track and field), Darts, Cycling, Golf, Tennis, Badminton
- <https://transplantsportireland.ie/>



- A world Transplant Games Federation Initiative
- Free online programme offering guidance on physical activity, mental wellbeing and nutrition

<https://wtgf.org/refitforlife/>

WHAT DOES IT INCLUDE:



Move Right!

- ✓ Essential information on physical activity post-transplant
- ✓ Rehabilitation Exercise Program with four levels of intensity
- ✓ Collection of online exercise classes from beginner to more advanced routines



Think Right!

- ✓ Practical guidance to help to regulate emotional, psychological and social wellbeing
- ✓ Collection of video classes designed to support your journey to an improved quality of life, unlock your own inner power and feel a greater sense of ease

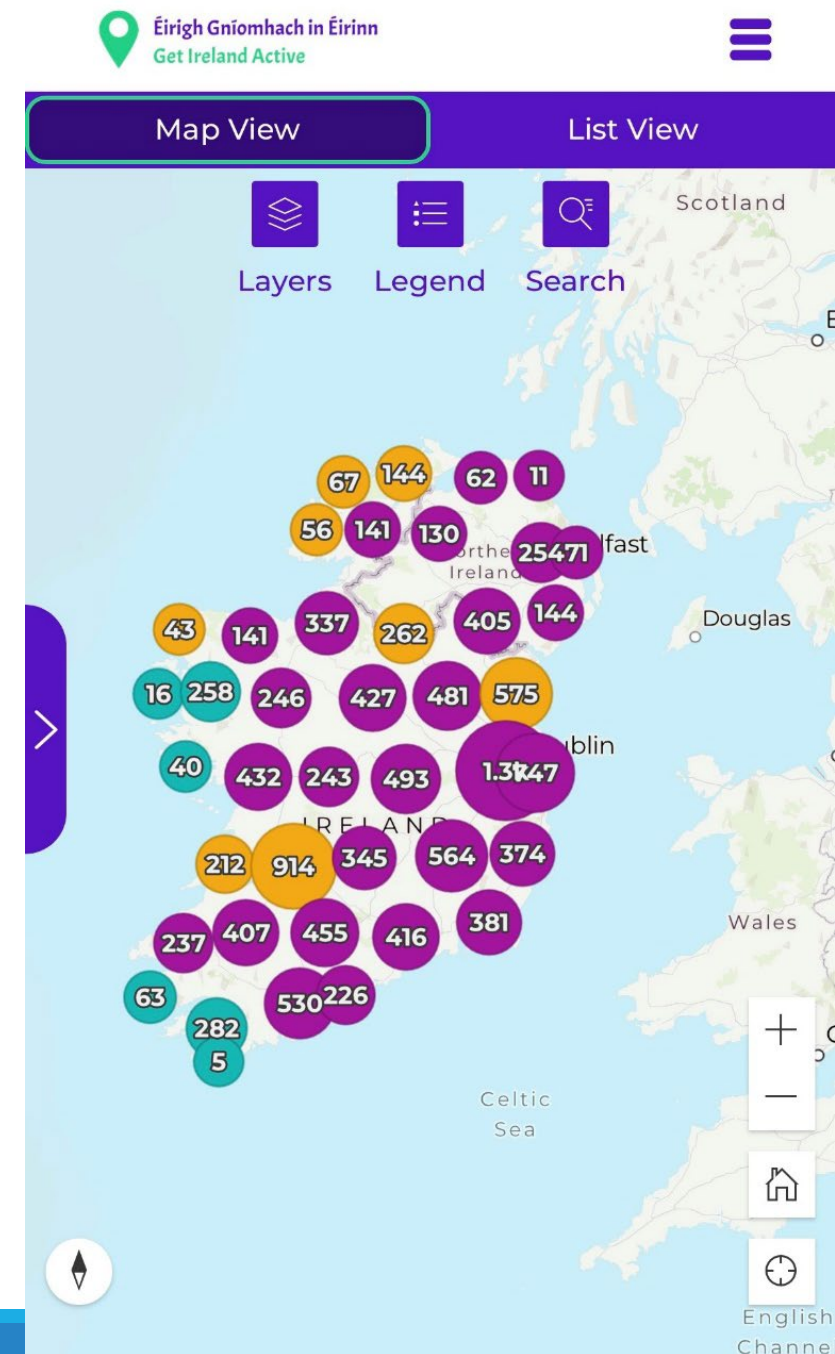


Eat Right!

- ✓ Support your recovery, healing and ongoing longevity with nutrition and dietary guidelines post-transplant
- ✓ Collection of delicious Refit for Life! recipes

Other Useful Websites:

- www.getirelandactive.ie
- www.getirelandwalking.ie
- www.sielbleu.ie
- www.iscp.ie/find-a-physio



Setting Goals

SMART Goals – Specific, Measurable, Achievable, Realistic, Time-Bound

Examples of SMART Goals:

- *To increase your average step count per week by 500-1000 steps per day in 4 weeks*
- *To reduce my portion sizes at dinner*
- *To cut down from having 2 biscuits every evening with my tea to 1 biscuit*
- *To prepare a homemade dinner at least 3 times per week*



Barriers- Finding Time



Busy Schedules- Do not need to dedicate large amounts of extra time to exercise to see the benefits
People will gain the most benefit from exercises they enjoy that fit their lifestyle.

- I'm too tired" → Start small (5-10 min a day).
- "I don't have time" → Exercise in short bursts (3x10 min)
- "I don't like gyms" → Walk outdoors, do home workouts.
- "I'm worried about safety" → Modify exercises & consult your doctor.

Taking the stairs instead of an lift/escalator

Can you replace some car journeys with walking-Try parking half a km away from the office or get off the bus or train a few stops early

Try to think about the amount of time spent watching television – You could try and get some exercise in during ad breaks or while watching shows



Track your progress

People who track their progress tend to succeed more, as it helps them to stay aware of their progress

Consider keeping a food and activity diary (Start by keeping your workbook diary for one day in the next week)

Smartwatch- stepcount, exercise sessions

An occasional slip is normal and it is not the end! Don't allow a slip up make you lose sight of your overall goals and the progress you have made instead, learn from it

Where Do I Start?



- Choose an activity that fits your routine
- Set GOALS & rewards for yourself. Track your progress
- Find your WHY?
- Get Friends and Family involved- Support or Join In
- Utilise available resources- Kidney Beam
- Join a group- walking group, chair yoga group
- Try to spread exercise out over the week
- Preparation- Make sure you have the right gear, hydrate, eat before
- Enter a physical activity event.



Benefits of exercise- Feedback

Since starting intradialytic exercise, I can now walk up the stairs without taking a break, and at weekends I can take my boat out in **Dun Laoghaire**. I didn't think it would be possible to get back doing what I love.



Brendan - Age 81
TUH Haemodialysis Patient

This class has helped my home life and work life. I can now play with my kids and exercise on my days off, before I needed the time to recover from my work days but now I have lots of energy



Richard - Age 49.
CKDIV- Attended TUH Onsite Exercise Class

It is an excellent programme full of information, very supportive and extremely helpful. It has helped me to feel more positive about my health. I never thought I would walk without my walker again & I'm wearing a dress to my daughters wedding for the first time in years.



Barbara Age 56
Attended Virtual Exercise & Lifestyle Programme

The exercise class helped me to regain the energy and confidence to exercise. I'm more energised, walking better, in better humour and feel stronger
It was motivational and I have returned to a hobby I loved of hill walking for the first time in 10 years.



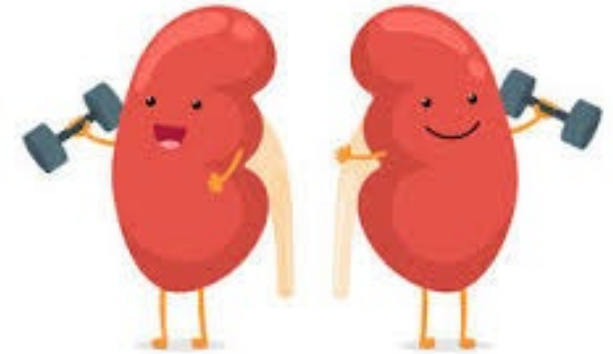
Sarah - Age 58
Transplant Patient.
Attended TUH Onsite Exercise Class

The programme has had a tremendous influence on me from the theoretical to the physical exercise everything was spot on.
I have started maintaining the routine and will endeavor to do more. I suggest the programme be continued as it is life saving!



Emmanuel Age 47
Attended Virtual Exercise & Lifestyle Programme

What small changes can you make today?



Exercise is Medicine- Take your dose daily