Rehabilitation & Exercise
For Renal Patients
The Importance of Rehabilitation for Renal Patients

Most people diagnosed with kidney disease are able to lead active and fulfilling lives.

Following your initial diagnosis, you may have experienced concern about what it means to have kidney disease. You may have fears about dialysis and transplantation and the effect these treatments may have on your physical abilities, employment prospects and social life.

However, thousands of people with kidney disease are living proof that these fears can be overcome. Many dialysis and transplant patients are fully rehabilitated with physically active and interesting lives which often include jobs, sport and varied social activities.

The key for many has been a program of rehabilitation and physical exercise, planned with the help of renal support services. This brochure provides information on rehabilitation and exercise with suggestions to help you restore and maintain an active, rewarding lifestyle.

What is Rehabilitation?

Rehabilitation is a process which results in the restoration of an individual to his or her maximum possible level of function and all-round achievement. For people with kidney disease, it includes restoration of well-being, physical performance, emotional stability, social adjustment and work capacity.

Progress towards rehabilitation is seldom steady and there is no complete state or final goal in the process. Your success will depend on many factors including the stability of your medical condition, your motivation and desire to learn and your feelings of emotional well-being. Many people with kidney disease achieve a satisfying level of rehabilitation and some, over time, progress to even greater levels of achievement.
To help you decide whether you are ready to embark on a rehabilitation program, you should consult your doctor and renal social worker who can advise you on the important “first steps”.

**Vocational Rehabilitation**

A number of people with kidney failure maintain their present jobs and activities. Other may change their work for a variety of reasons. Rehabilitation services such as Commonwealth Rehabilitation Services based in each state in Australia can help in a number of ways. Rehabilitation consultants may meet with you to determine the kind of work best suited to your abilities and interests, provide training for a new job if necessary and assist with job placement if required.

You may be concerned about raising the question of your medical condition with your employer or at a job interview. It is important to be honest about your situation and positive about your potential. Your employer may know little about kidney disease and will need information to ease his/her concerns about your ability to work.

It may be best to raise the issue with your immediate supervisor, the person with whom you will be directly working. Matters for discussion may include your work duties and how these can be integrated with your dialysis schedule, physical limitations you have for the job requirements and information that company medical staff should have in case of an emergency.

Your employer will be interested in discussing these issues with you but may be reluctant to bring them up. An honest and forthright approach by you is likely to impress most employers.
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The Benefits of Exercise

Increasingly, there is evidence that a physical exercise program, integrated into your total treatment plan, has positive benefits for your general health, including weight loss, improved muscle strength, lower level of cholesterol and blood fats, increased cardiac output and greater physical exercise capacity. Many of these benefits will also lower your risk of heart disease, a risk which is greater for people with kidney disease than among the general population.

The psychological benefits of exercise are also important. Routine exercise can enhance feelings of self-esteem and create a sense of independence and may help control feelings of depression and anxiety which are sometimes present.

Planning an Exercise Program

For people with end-stage renal disease, regular exercise is extremely beneficial. It is desirable that an exercise program be designed to fit your own physical capabilities. This will eliminate the likelihood that you will over-exert yourself or exercise to the point of exhaustion.

Before beginning an exercise program, you must consult your doctor who may recommend you undergo a medical examination, and if need be, a cardiac examination. As long as your condition is stable and your doctor believes you will benefit from regular exercise, you are likely to be given the all-clear. Your physician may wish to review your blood chemistry and blood pressure following exercise.

You should also make sure to comply with your medication and dietary instructions.

The hardest part of your program may be finding time to exercise, especially if you are undergoing dialysis. With the right guidance, you can learn to integrate an exercise regime into your lifestyle and you may soon find improvements in energy and enthusiasm for life are motivation to continue.
The Exercise Program

There are no general instructions for exercise that apply to all people with renal disease since each person’s health and fitness levels, motivation and time constraints are different. Generally, the most effective exercises for cardiac fitness are those that use large muscle groups in a rhythmic manner.

Consider the following when designing your exercise program:

**Type of exercise** - best are continuous activities such as walking, swimming (particularly good for people with joint pain), bicycling (stationary or mobile), skiing or aerobic dancing.

**Frequency** - a minimum of three and no more than five days per week, e.g. Monday, Wednesday, Friday, Sunday.

**Duration** - begin at a level that is suitable for you, e.g. five minutes per session. From there, gradually build up the duration of each session by adding one or two minutes each week. About thirty minutes per session is a good level to aim for, although you may feel like exercising longer.

**Intensity** - it is difficult to give general advice on exercise intensity as this depends so much on your individual capacity. In general, you should feel completely recovered within one hour of exercising and you should not feel so much muscle soreness that you are unable to exercise the following day. Each session should be with a slow warm up, rise to a comfortable level of effort and then slow down again before the finish.

Ideally, exercise will be integrated into your regular daily routine and, with time, will become easy and enjoyable. Remember, you should see your doctor before beginning an exercise program and be aware that your participation may need to be evaluated if you have changed your dialysis schedule or medication, are feeling unwell or have any joint or bone problems which might be adversely affected by exercise.
An active role in family and community life, recreation and work may be difficult at first. Patience and dedication on your part is essential, as is evaluation, guidance and support from those involved in your rehabilitation, work and private life.

It has been demonstrated in many individual cases that, when all these elements are working together, remarkable results in rehabilitation are possible.

**What Support Services are Available?**

In Australia, there are numerous general rehabilitation programs run by hospitals in all capital cities and in many regional centres. Most of these programs are appropriate for people with renal disease and can be tailored to meet your individual rehabilitation goals.

The staff of your dialysis or transplant unit are a good source of advice and assistance. Your GP and renal physician, nurses and renal social workers all have an important role and you will find their advice and counsel most helpful.

The most important person involved in the rehabilitation process is you. Your enthusiasm and commitment is vital to success but you are not alone. The encouragement of family and friends is important and their involvement in your program can also help overcome some of the practical difficulties such as transport or assistance with exercise routines.
It was once thought that people with kidney disease could not participate in vigorous exercise because of fatigue caused by anaemia or complications of treatment. It is now known that the physiological changes brought on by regular exercise are beneficial and exercise may be just as important for kidney patients as it is for the general population.

People with end-stage renal failure may feel tired and weak due to anaemia (a low red blood cell count). Researches have found that patients who exercise increase their red cell count significantly, providing more energy for an exercise program and for activities of daily life.

Red blood cell production is controlled by a mechanism in the kidney. Healthy kidneys produce a hormone called erythropoietin, which is responsible for red blood cell production. People with chronic renal failure have a diminished ability to regulate red blood cell production because of reduced erythropoietin production.

For people undergoing dialysis, there are drugs available that dramatically relieve anaemia and its associated symptoms. There are man-made versions of erythropoietin which may be prescribed by your renal physician.

This treatment removes a person’s dependency on blood transfusions by stimulating red cell production and correcting the anaemia. In turn, this reduces the number of antibodies acquired through blood transfusions and improves the chances of successful transplantation.

Correction of anaemia results in enhanced quality of life through the improvement of energy levels, exercise performance, fatigue and sleep patterns. This, in turn, may have a significant effect on your motivation to continue rehabilitation.
Getting Started: Where to Find Help

You may find that coping with adjustment due to your kidney condition is easier with the support of family, friends, your medical team and the information resources that are readily available.

The Renal Resource Centre is a national resource providing information, telephone counselling and referral and educational material to renal patients, their families and health professionals on all aspects of kidney disease and its management.

Negotiating the health system and the vast array of information available via the internet is sometimes bewildering. The Renal Resource Centre can help you to source the most appropriate information and services.

The Renal Resource Centre provides information and educational materials on kidney disease, dialysis and transplantation for patients and health professionals.

The primary objective of the Centre is to ensure that patients have easy access to such information, are well informed and can actively participate in their own health care. The Renal Resource Centre is committed to providing education and service to the renal community.
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