The kidney is a vital organ in the body for sustaining life. Most people have two of them. Kidneys are responsible for regulating acid-base balance (acid in the blood), controlling blood pressure, producing erythropoietin (a hormone, also known as EPO) to make red blood cells, regulating minerals to maintain bone strength, excreting waste products and metabolic toxins and regulating fluid balance to keep the body adequately hydrated.

When kidney function deteriorates, whether suddenly (Acute Kidney Injury, AKI) or over a longer period of time (Chronic Kidney Disease, CKD), the body loses the ability to function as it should. Careful management from experts in the field can treat or manage the condition to improve quality of life.

Sometimes treatment is not possible and people have to rely on a form of dialysis (where the blood is artificially filtered and cleaned). They often also need to alter their diet. Many people go onto a kidney transplant list.

It is thought that around 5% of the UK population have CKD (3,205,000 people) and up to 630 people per million in the UK have AKI (40,320 people). 40,000 people currently require dialysis as treatment or have functional kidney transplants.
The role of the dietitian
The role of the Renal Dietitian is diverse, with involvement in the nutritional care of patients with renal disease in the early stages, pre-dialysis, dialysis and post transplantation. Dietary advice is often complex and changes dependant on the stage of kidney disease and the individual needs of the patient. Minerals from foods we eat can build up to dangerous levels. Nutritional intervention ranges from specific dietary restrictions e.g. potassium and phosphate, to weight reduction and nutrition support to improve the nutritional adequacy of someone’s diet.

Innovative dietetic services
Specialist dietitians in kidney disease use innovative and successful practice and resources across the UK. Examples include:

- Phosphate counting guides to enable flexibility and sensible food choices for people needing phosphate restrictions (Hull Star Guide)
- Monthly phosphate monitoring charts to identify patterns, changes and comparisons with ideal phosphate levels (PhosForm)
- Pictorial illustrations of what contains fluid and how much fluid certain foods contain to improve patient knowledge of the components of our foods
- Weight reduction programmes specifically designed for people who want to go onto the kidney transplant list
- Bone management protocols to enable efficient and effective prescription of relevant phosphate binder and Vitamin D analogue medications

Case study
Mrs Y presented to the dietitian with symptoms of itching all over her body day and night. It was distracting her from achieving normal activities, such as getting her hair cut and was preventing her from sleeping well at night. Her skin was starting to become red and sore from repeated scratching. A blood test revealed high phosphate levels in her blood, something that the kidney would normally regulate. If the phosphate level remained high long term then it could cause damage to the blood vessels and bone weakness.

The dietitian was able to explain the reason for all of the itching, and was able to identify foods and drinks in Mrs Y’s diet that were contributing to the high phosphate level. The dietitian advised on more suitable, lower phosphate, foods and drinks which Mrs Y still enjoyed and also advised when to take medication that helps reduce phosphate in the blood.

Mrs Y “It was such a relief when the itching improved, and to know that it was all because I changed my diet. The dietitian considered all the things I liked and was really helpful knowledgeable.”

“Advising a patient on enjoyable foods they can eat and drink safely whilst factoring in the complex nutritional needs of a renal patient is challenging but hugely rewarding. Seeing a worried patient who has heard of the horrors of a ‘renal diet’ and being able to reassure and resolve these fears during a consultation is very satisfying. Empowering them to have confidence to make their own dietary changes based on sound knowledge is what our work is all about.”

Renal Dietitian

References
Useful websites for further information:
BDA Renal Nutrition Specialist Group: https://www.bda.uk.com/regionsgroups/groups/renal/home
The Renal Association: http://www.renal.org
British Renal Society: www.britishrenal.org

The British Dietetic Association, founded in 1936, is the professional association for dietitians in Great Britain and Northern Ireland. It is the nation’s largest organisation of food and nutrition professionals with over 8,000 members. The BDA is also an active trade union. To find out more about other areas of work that dietitians are involved in please visit:

www.bda.uk.com

Try our:
Food Fact Sheets: these give information about foods and also about medical conditions - available on the website.

Why not follow the BDA:
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