

KIDNEY CANCER DIET & NUTRITION

A guide for patients
and their families



An initiative of:



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"When you invite someone
to sit at your table and you
want to cook for them,
you're inviting a person into
your life."

(Maya Angelou)



The organisations behind this guide **would like to sincerely thank** each and every individual and organisation that voluntarily agreed to participate in this initiative that you now have an opportunity to read.

Thank you for accepting this invitation and *for sitting at our table.*

Every good meal and great evening is made up of many ingredients and kind gestures that have an exponential effect on the result. That is the story behind this guide, highlighting **the importance of working as a team and involving multiple disciplines.**

Thank you to Antonio, Javier, Mar, Mayte and Tomás for telling us your first-hand experiences and sharing a part of your lives that inspired us to *create this guide in the way that a chef creates a menu.*

Thank you to the team of professionals for sharing your time, knowledge and experiences in your respective disciplines, *essential ingredients of the highest quality.*

Thank you to our collaborators for providing us with essential tools and resources and for giving us the opportunity to use the *utensils needed to create this guide.*

Thank you to everyone who volunteered to revise the final text to ensure it was well *seasoned.*

Thank you to the technical team who have worked on this guide for *putting on their aprons, following the recipes and setting the table* so we have fun and learn how to improve our quality of life through the food we eat.

Thank you all for *enhancing the flavour of life* through your professional and personal commitment and quality.

KIDNEY CANCER DIET & NUTRITION

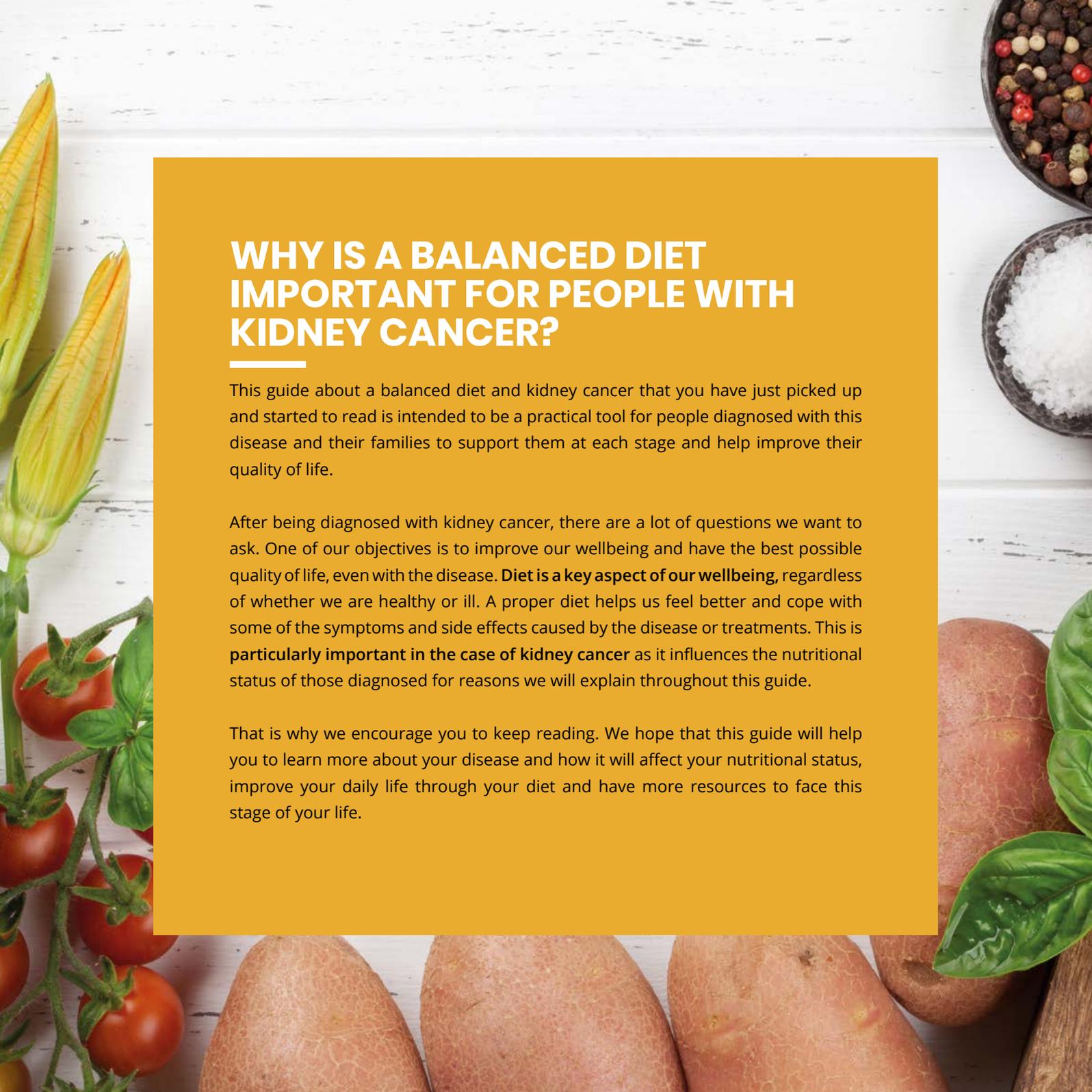
A guide for patients
and their families

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WHY IS A BALANCED DIET IMPORTANT FOR PEOPLE WITH KIDNEY CANCER?

This guide about a balanced diet and kidney cancer that you have just picked up and started to read is intended to be a practical tool for people diagnosed with this disease and their families to support them at each stage and help improve their quality of life.

After being diagnosed with kidney cancer, there are a lot of questions we want to ask. One of our objectives is to improve our wellbeing and have the best possible quality of life, even with the disease. **Diet is a key aspect of our wellbeing**, regardless of whether we are healthy or ill. A proper diet helps us feel better and cope with some of the symptoms and side effects caused by the disease or treatments. This is **particularly important in the case of kidney cancer** as it influences the nutritional status of those diagnosed for reasons we will explain throughout this guide.

That is why we encourage you to keep reading. We hope that this guide will help you to learn more about your disease and how it will affect your nutritional status, improve your daily life through your diet and have more resources to face this stage of your life.



Why is it important to talk about your diet when you have kidney cancer?

People living with cancer need to maintain a good nutritional status. To achieve this, it is essential to eat a balanced diet and have healthy lifestyle habits at all stages of the disease, from the moment of diagnosis. **Having a good nutritional status will help them cope better with treatments and any physical complications that occur, speed up recovery and improve their quality of life.**

For people living with kidney cancer, it is very important to maintain a balanced diet in order to help their kidneys function properly. Our kidneys regulate the balance of water and minerals in our body, maintain salt, sugar and nutrient* levels in our blood and remove anything that our body does not need. Consequently, the way we eat influences how our kidneys carry out these functions. Kidney cancer stops the kidneys

from working properly, so we need to change our eating habits to reflect that and put special emphasis on controlling certain elements of our diet.

When we have cancer, we may experience side effects or physical complications caused by the disease itself or the treatments we receive. For example, changes in the way that food and drink move through our intestines causing diarrhoea or constipation, nausea, changes to our sense of taste, etc. In addition to the medications available to alleviate this, some dietary measures can be of great help, such as adjusting the amount of fibre and astringent foods we eat, seasoning food in another way or having more or fewer meals through the day.

Cancer can make us feel scared, anxious and uncertain, as well as



other emotions that can affect our eating habits, such as by reducing our appetite. **The key to being able to cope with this situation is to have the support and information you need to help you get the best nutritional care.**

Food is an essential part of many cultures because "eating is also a social activity." When we sit around a table, we not only share a tablecloth but also our lives, our day-to-day celebrations and get-togethers, which sometimes end in us talking long into the night. It is important to continue enjoying these moments and that is why we have written this guide, full of advice on how to adapt your diet to your specific situation and continue to make the most of life.

How do I know what I should eat at each stage of the disease or in case of certain symptoms?

What are the best ways to cook or the best foods for me to eat?

This guide will help answer these questions. In the following chapters, you will find general and specific information and recommendations on what to eat, as well as meal plans and practical tips for cooking.

The content has been written by professionals from a variety of healthcare disciplines: nephrology, urology, oncology (medical and radiotherapy), endocrinology, nutrition and dietetics, oncology pharmacy, psycho-oncology, social work, physical exercise, and representatives of patient and civil organisations.

Each of the perspectives given on feeding in this guide are needed to answer your questions and help you better understand what you are going through.



HOW TO USE THIS GUIDE?

Whether you are a patient or a family member, the information in this guide will help you answer many of the questions about what and what not to eat after being diagnosed with kidney cancer and what you can do to improve your wellbeing or that of your relative.

READING TIPS

Everyone goes through a different situation with different needs. For that reason, we suggest you adapt this information to suit your specific case. We offer a series of suggestions and recommendations below on how to best use this guide so you can get the most out of it:



The recommendations made in this guide do not replace those made by your healthcare team

The objective is to help you better understand this disease and take greater control of your health and quality of life. Talk to your healthcare team about any questions you think of while reading this guide and any changes you want to make to improve your diet and wellbeing.



Choose what you want to read and in what order according to your specific case

You can read each chapter of this guide independently, without having to follow the contents page, although we recommend that you start with chapters 1 - "What is kidney cancer?" - and 2 - "How does kidney cancer affect my nutritional status?" - in order to better understand the disease and what effect it has on your nutritional status. Then read chapter 3 - "Localised kidney





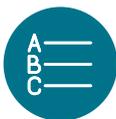
cancer: How do I maintain a balanced diet?" - or chapter 4 - "Advanced kidney cancer: How do I maintain a balanced diet?" - depending on your situation. Finally, finish with chapter 5 - "How can I improve my quality of life?" - in which we give you some guidelines on how to start exercising again and ways to identify and manage your emotions.

Throughout this guide you will find information about treatments, side effects or physical complications and emotional reactions, among others. Although they are discussed, that does not mean they are going to happen. Every person and every disease is different. That is why we recommend that you take into account your specific situation (for example, the type of kidney cancer diagnosed, treatment you are receiving or physical complications you are experiencing) and only incorporate suggestions that may help you and that best suit your situation.



Meal plans and recipes

Throughout the guide we propose a series of meal plans, recipes and recommendations that you can adapt to your specific case and preferences.



Glossary of terms

The most difficult to understand words are either explained in the text or defined - if there is an asterisk (*) next to them - in the "Glossary of terms" section that you will find at the end of this guide.



"My Notes"

We have added some blank pages at the end of this guide. You can decide how to best use them, for example to write down questions you want to ask your healthcare team, make a note of the most important points, plan meals, etc.



Bibliography

If you want to learn more about any of the topics in the guide, we suggest you refer to the bibliography. Be aware that some of the resources are aimed at medical professionals and may be difficult to understand, or even written in another language.



Latest information at the time of publication

The information provided in this guide is the latest available at the time of publication. Consequently, it does not include any data gathered after that date related to knowledge of the disease or advances in treatment, nor the different topics that are covered within it.



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We hope that you will find useful and practical information in this guide that helps improve your diet.

We would like to accompany you on your journey and make each page of this guide one step closer to improving your wellbeing.

A couple is seen from behind, walking through a park with vibrant autumn foliage. The woman on the left has blonde hair and is wearing a light-colored, textured sweater and brown pants. The man on the right has dark hair and is wearing a similar light-colored sweater and light-colored pants. The background is a soft-focus mix of yellow and green leaves.

01

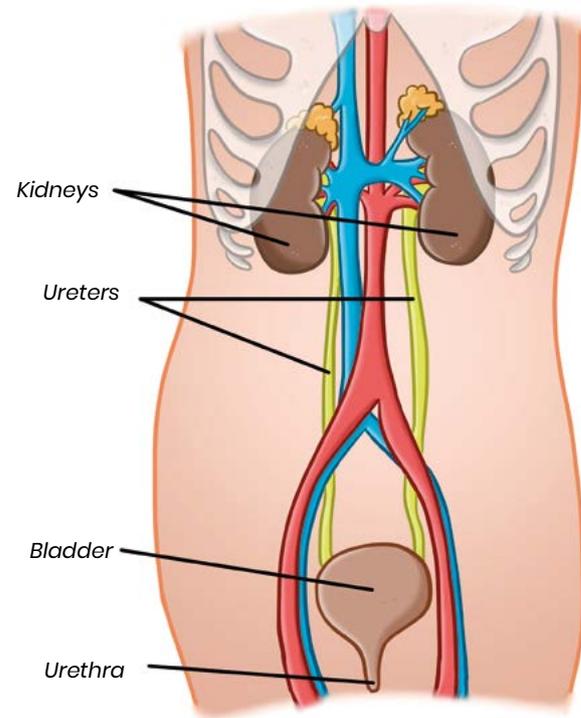
WHAT IS KIDNEY CANCER?

Being diagnosed with kidney cancer is a life-changing event that brings with it a great deal of uncertainty. You might start to hear medical and technical terms that you don't always understand. That is completely normal, since most of us are not experts in medicine. For that reason, we have dedicated this first chapter to offering you some general information about the disease to help you understand it better.

1. THE URINARY TRACT

The urinary tract is made up of a group of organs whose most important **jobs** are to:

- › Filter the blood
- › Maintain a balance of water and minerals (sodium, potassium, calcium, phosphorus, magnesium, etc.)
- › Produce hormones* that stimulate red blood cell production, regulate blood pressure and mineralise bones
- › Remove waste products that our body cannot use. These are removed through micturition, the medical term for excreting urine, a yellowish liquid composed of water, urea, uric acid, creatinine and mineral salts
- › Regulate internal liquids or body fluids and balance salt, sugar and nutrient levels in the blood



Organs in the urinary tract

THE MAIN ORGANS IN THE URINARY TRACT ARE:

> The kidneys

The kidneys are two bean-shaped organs that are approximately the size of a fist (10 to 12 cm). They are located just below the rib cage, the collective name for the ribs on both sides of the spine. Above each kidney is an adrenal gland.

The kidneys remove waste products and excess fluid from the body, as well as the acid produced by our cells. By doing so, the kidneys maintain a healthy balance of water, salts and minerals (sodium, calcium, phosphorus and potassium) in our blood so that our nerves, muscles and other tissues can function properly.

The urinary tract allows blood to flow into the kidneys through the renal artery. Each kidney filters approximately one litre per minute. It is the nephrons inside the kidneys that carry out the metabolic process of filtering out waste products that are or may be toxic.

The kidneys also perform other important functions by secreting hormones*. For example, the hormone erythropoietin stimulates red blood cell production, renin regulates blood pressure and calcitriol* activates vitamin D to maintain the level of calcium in our bones.



UREA: one of the main waste products. Urea is created while the body processes proteins and is therefore directly related to the amount of protein we eat. We normally excrete it through urine and sweat.

URIC ACID: an organic compound that is created when chemicals called purines are broken down. Purines are normally produced in the body and can also be found in some food and drink.

CREATININE: a waste product that is produced by the muscles at a constant rate as part of their daily activity. Normally, the kidneys filter out creatinine from the blood which the body then expels through urine.

> **The renal pelvis and ureters**

The renal pelvis is the area in the centre of the kidney where the urine produced accumulates and drains into the ureter.

The ureters, one for each kidney, are the tubes that carry urine from the kidneys to the bladder.

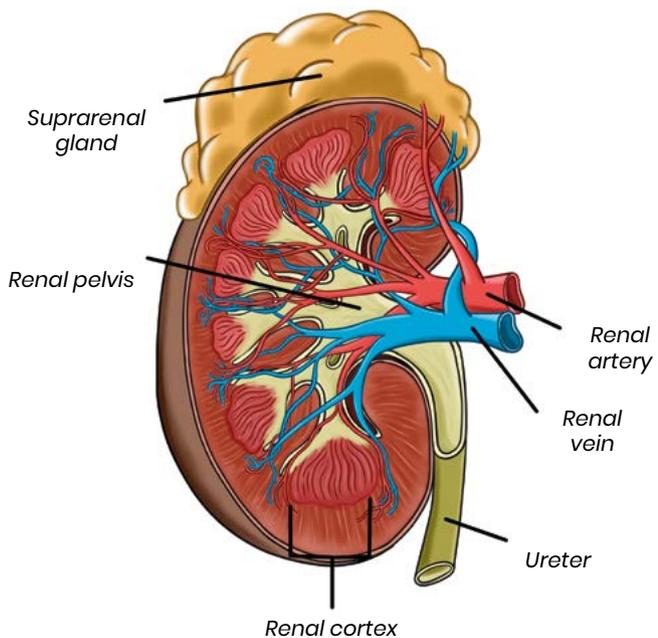
> **The urinary bladder**

The bladder is a hollow, muscular, balloon-shaped organ

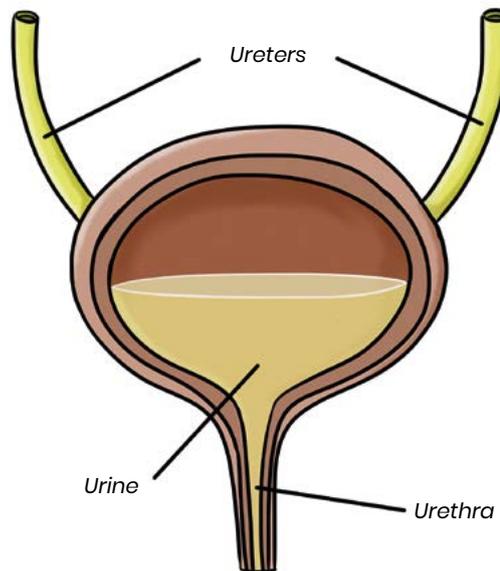
located between the pelvic bones at the bottom of the abdomen. The bladder receives, stores and empties the urine produced in the kidneys and expands as it fills with urine. The process of emptying the bladder is known as micturition or urination.

> **The urethra**

This is the final tube at the end of the urinary tract through which the urine stored in the bladder exits the body.



Anatomy of the kidney



Anatomy of the urinary bladder

2. KIDNEY CANCER

Kidney cancer is a disease that originates in the kidneys and **is caused by the abnormal and uncontrolled growth of some of the cells in these organs.**

It accounts for 2-3% of all cancers. It is twice as common in men as in women and is most often diagnosed between the ages of 40 and 60 (especially over the age of 50), although it can occur at any age.

2.1. RISK FACTORS

The causes of kidney cancer are not yet well known but **ageing, obesity, smoking and exposure to certain chemicals** (cadmium, asbestos, petroleum), as well as **high blood pressure and acquired cystic kidney disease*** (a complication developed by some people on long-term dialysis) have all been identified as risk factors.

It mostly occurs sporadically (no family history) although on rare occasions it is part of an **inherited syndrome** (only 5% of cases). There are several hereditary syndromes that can cause different types of kidney cancer associated with other types of tumours. If a patient has an immediate family member who was diagnosed with kidney cancer under the age of 40, or if they have bilateral or multifocal renal cancer (i.e. more than one tumour in a kidney), there may be a hereditary element involved. In these cases, which, as

we said, are very rare, the person diagnosed and their relatives may be advised to undergo specific diagnostic tests that are carried out in **genetic counselling units***. The aim is to evaluate each family member's individual risk of developing kidney cancer and to adapt the most appropriate medical and therapeutic follow-up guidelines to suit their situation.

2.2. SYMPTOMS

Most of the time, kidney cancer does not cause any signs or symptoms that would make us suspicious, so it is usually diagnosed by chance through an abdominal scan performed because of another medical problem. However, **one in ten people experience pain in their side, find a lump in their abdomen or see blood in their urine.**

Sometimes people suffer from paraneoplastic syndromes - the name for different reactions the

body has when it detects any kind of cancer. The most common of these are high blood pressure, weight loss, anaemia, loss of muscle mass and decreased appetite.

2.3. DIAGNOSIS

In recent years, the increased use of ultrasounds and tomography (CT scan) to study other conditions has led to an increase in kidney cancer diagnoses. Tumours are being detected at an ever-smaller size and earlier stage*, meaning the disease is localised and only inside the kidney, having not yet spread to other areas or organs in the body. This, together with the emergence of new treatments, has significantly improved the survival rate of people with kidney cancer. Currently, kidney cancer has a very high survival rate: 92% after five years, especially if it is localised, which is the case for two thirds of those diagnosed (65%).

The following is a brief explanation of the **specific studies or tests that may be requested in order to establish a diagnosis**:

Physical examination, medical history and family history

A physical examination is **important to check your overall health** and identify any signs of disease, such

as lumps, swelling, or other unusual findings.

Examinations are also an opportunity to talk to you and ask about your habits, medical history and treatments received. It is also important to find out, as we have already mentioned, if there is a history of cancer in your family.

Blood and urine tests

Your specialist may recommend a blood test to check your red blood cell count and a urine test to check for the presence of blood, bacteria or fungi. **These tests may detect cancer cells or signs suggestive of kidney cancer**, but further tests must be carried out to make a definitive diagnosis.

Diagnostic imaging

Diagnostic images make it possible to determine the **size of the tumour, its location and whether it has spread** to nearby structures (veins, adrenal gland, lymph nodes*, etc.) or to organs further away (metastasis*).

Some of these tests are:

- **CT (Computed Tomography) scan with contrast**

This is the most common type of imaging test. It uses X-rays to obtain radiographic images of the inside of the body. It is completely painless. During the procedure, the patient lays on a table. A contrast dye is injected into one of their veins, or they are asked to swallow it, so that their organs or tissues are easier to see.

- **MRI (Magnetic Resonance Imaging)**

This scan uses magnetic waves and computer processing to create a series of detailed images of different areas inside the body. An intravenous contrast dye is sometimes used to help.

- **Abdominal ultrasound**

During this procedure, high-energy sound waves (or ultrasound) are bounced off internal tissues or organs. The echoes received create an image of the body tissues, which is called a sonogram. It is useful to identifying kidney tumours and determining whether they are cystic (contain a liquid) or solid in nature. These scans use ultrasound, not radiation.

- **PET/CT (Positron Emission Tomography/Computed Tomography)**

The latest technology enables PET and CT scans to be performed at the same time (known as a PET/CT scan). This makes it possible for PET scans to locate areas of the body where cells are using more energy (suggesting they are cancerous) more precisely. This is not a common technique and should only be used in specific cases.

- **Bone scan**

This imaging test is usually carried out to assess the extent of the disease. It shows if the cancer is affecting the bones, a radioactive substance is injected which collects inside them. They are then analysed with a scanner capable of detecting radioactive substances and identifying the presence of tumours.

Tumour biopsy

In a tumour biopsy, a small amount of tissue is removed for examination under a microscope. This is normally done by an interventional radiology team as an outpatient procedure under local anaesthetic, and the sample obtained is analysed by pathological anatomy* experts.

It is important to note that this diagnostic test is **only performed in very specific circumstances**, such as when imaging tests are not conclusive enough, when patients have a tumour that needs active surveillance or are candidates for ablative techniques, which we will explain in more detail later.

2.4. TYPES

The most common type of kidney cancer is renal cell carcinoma*, which accounts for 80-85% of all kidney cancers and is further categorized by subtypes:

- › **Clear cell carcinoma.** This is the most common subtype, affecting about 80% of people with renal cell carcinoma.
- › **Papillary carcinoma.** This occurs in 10-15% of people with renal cell carcinoma.
- › **Chromophobe carcinoma.** This affects about 5% of people with renal cell carcinoma.

There are also other rarer subtypes. If you have any questions about the type of kidney cancer you have been diagnosed with, ask your healthcare team.

2.5. STAGING AND CLASSIFICATION

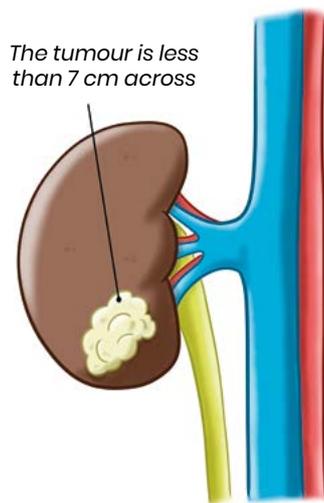
Kidney cancer, like other types of cancer, is **classified according to the stage, subtype and how aggressive the tumour cells are.**

The process used to find out if the cancer has spread throughout the affected organ or to other parts of the body is called **staging**. The information obtained in this process determines the stage* of the disease and is **important for creating a treatment plan.**

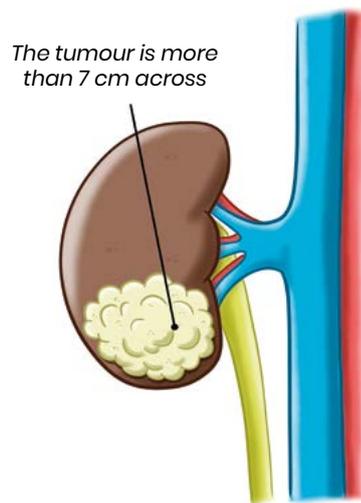
The TNM classification is used for staging. The letter T refers to the size of the tumour and how far the cancer has spread into nearby tissue; N refers to whether the cancer has spread to the lymph nodes; and M refers to whether the cancer has spread to another part of the body (metastasis).

The following stages are used for kidney cancer, based on the TNM classification:

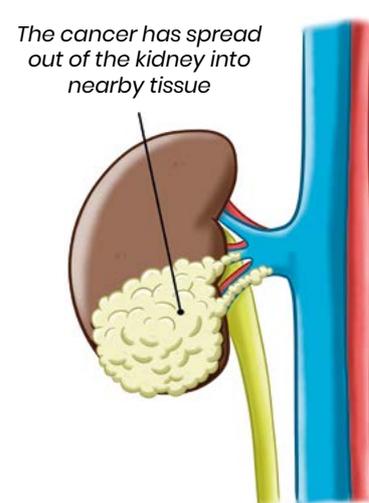
Stage I	The tumour is less than 7 cm across and is completely inside the kidney.
Stage II	The tumour is more than 7 cm across but is still completely inside the kidney.
Stage III	The tumour has invaded the adrenal gland, located just above the kidney, the layer of fatty tissue surrounding the kidney or the major blood vessels in the kidney (such as the vena cava), and may have spread as far as the abdominal lymph nodes.
Stage IV	The cancer has spread to other organs such as the intestines, pancreas, lungs, liver or bones, causing distant metastasis.



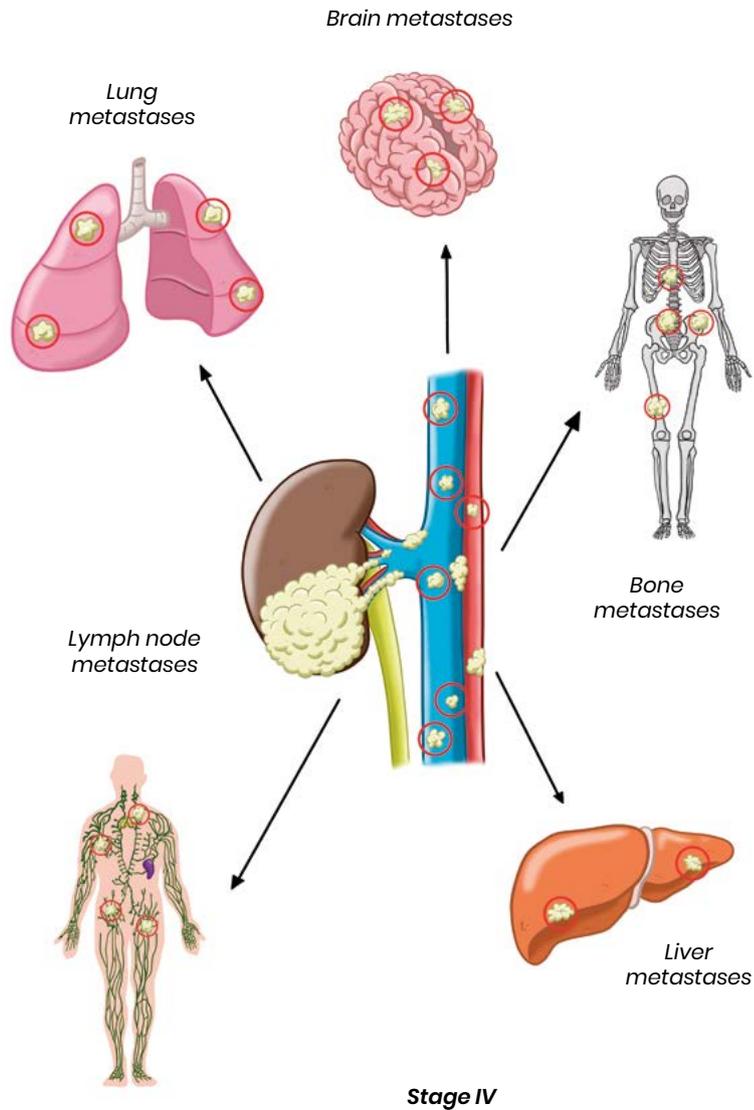
Stage I



Stage II



Stage III



Depending on the stage of the disease, tumours can be classified as:

LOCALISED

The tumour is completely inside the kidney and has not spread.

LOCALLY ADVANCED

The cancer has spread out of the kidney into nearby tissue invading the veins, adrenal gland or lymph nodes.

METASTASIC

The cancer has spread to distant lymph nodes or other organs.

The prognosis of kidney cancer will depend on a number of variables such as the type of cancer diagnosed, the stage of the disease, whether the lymph nodes have been affected and the patient's age and general health. In any case, early diagnosis is imperative.

Thanks to advances in medicine, there are many treatments and resources available that have been able to increase the survival rate and quality of life of people affected by kidney cancer. Speak to your healthcare team and ask them any questions you have about this.

3. TREATMENTS FOR KIDNEY CANCER

After confirming the diagnosis and staging the disease, the next step is to **determine the most suitable treatment plan** for the patient.

You and your healthcare team should discuss the following before choosing the right treatment:

- › Your medical history and previous operations
- › Whether you have a family history of kidney cancer
- › If you only have one kidney or if you have impaired kidney function due to other conditions such as high blood pressure or diabetes mellitus
- › If the cancer is in one or both kidneys
- › Recovery after surgery

In this section, we explain the **current treatments available depending on whether the kidney cancer is localised, locally advanced or metastatic.**

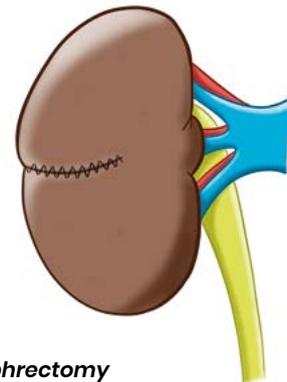
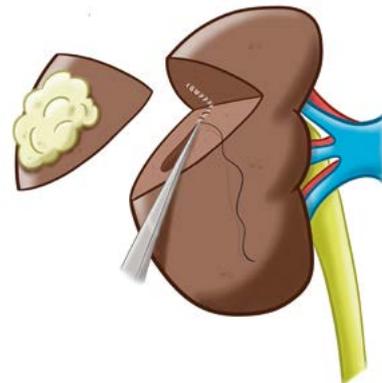
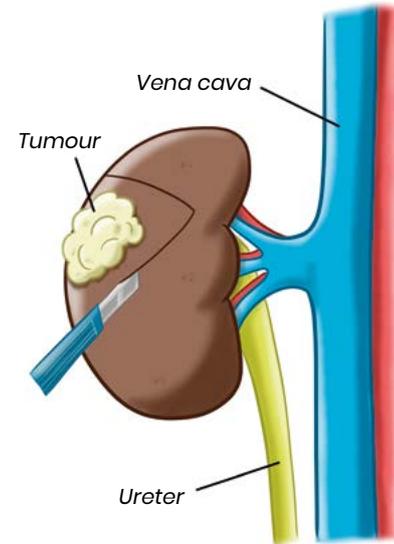
3.1. LOCALISED AND LOCALLY – ADVANCED KIDNEY CANCER

There are several different therapies available to treat localised kidney cancer. Treatment choice will depend on the size of the tumour, its location and the general health of the person affected.

> Surgery

Surgery is the most common way of treating localised kidney cancer. When the disease is only in the kidney, a surgical procedure called a nephrectomy could potentially cure it. In principle, it is offered to people with stage I, II or III cancer. There are two types of surgery:

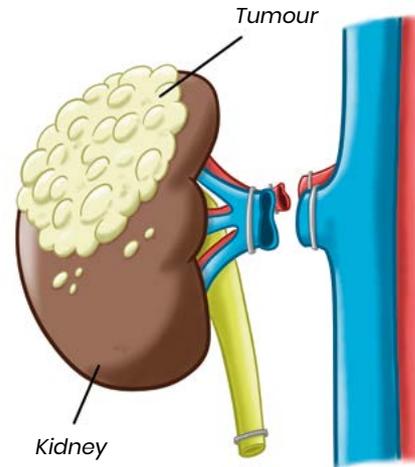
1. Partial nephrectomy: The aim is to remove the tumour while preserving as much healthy kidney tissue as possible. This technique is recommended when the tumours are less than 7 cm across, although individual circumstances are taken into account according to the person's characteristics and the location of the tumour. It can be performed through open or laparoscopic surgery.



Partial nephrectomy

2. Radical nephrectomy: This procedure is used to remove the entire kidney and is recommended when the tumour cannot be removed by itself or measures more than 7 cm across. Like a partial nephrectomy, it can be performed through open or laparoscopic surgery.

During a consultation after the surgery, you will find out the results of the tumour analysis, including its characteristics and type, and talk to your specialist about what next steps to take.



Radical nephrectomy

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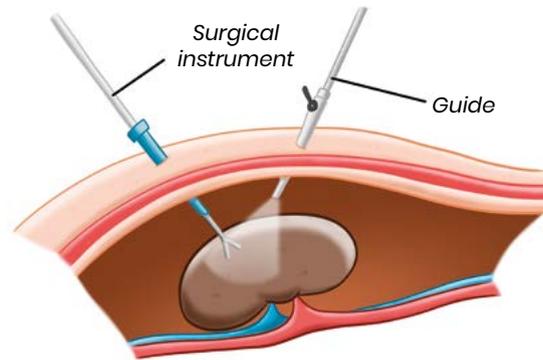
People can live a normal life with part of a functioning kidney but if **both kidneys are removed, they will need either:**

- dialysis (a procedure used to clean the blood)
- a kidney transplant (replacing the diseased kidney with a healthy one from a donor)

It is important to go to follow-up appointments. They enable the healthcare team to assess your kidney function and detect possible complications or relapses* (when the cancer returns) early.

i

The difference between open surgery and laparoscopic surgery is that in open surgery a single large incision (cut) is made in the side of your body. In contrast, during a laparoscopy, surgeons will make a series of small incisions (three or four), each about 2.5 cm in size, in your abdomen and the side of your body and use small surgical tools and a camera to perform the operation. The latter option is less invasive as it has the advantages of a faster recovery time, better pain control thanks to the shorter incisions, less chance of bleeding and less time in hospital.



Surgery via laparoscopy

If your medical/surgical history means that surgery is not possible or recommended as a first line of treatment, your healthcare team will assess the following alternatives:

➤ **Active surveillance**

Although this is not a treatment as such, it means that kidney tumours smaller than 4 cm across will be **regularly monitored**. Active surveillance aims to prevent or delay the risks of surgery or ablation.

Ablation therapy (thermoablation by cryotherapy or radiofrequency)

The purpose of these therapies is to **destroy tumour cells without losing healthy tissue**. This is done by heating (radiofrequency) or freezing (cryotherapy) the tumour. They are also an alternative for elderly people with significant comorbidities (meaning they have two or more diseases at the same time) and for tumours that measure less than 4 cm across and are located in a place where these therapies can be performed.

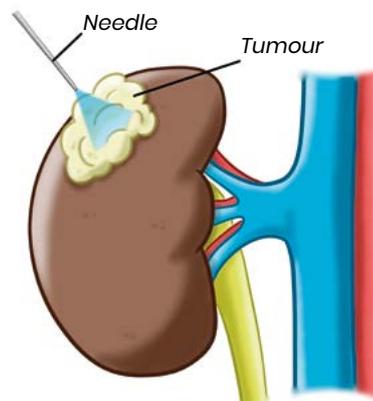


Both can be performed via laparoscopy or percutaneous ablation (making small, almost imperceptible incisions), although the latter is most commonly used.

> Arterial embolisation

This involves inserting a catheter (thin tube) through a blood vessel until it reaches the renal artery. Once there, small pieces of a special gelatinous sponge are injected to block blood flow to the kidney and stop the cancer cells from growing.

Locally advanced kidney cancer is usually treated with a radical nephrectomy and regional lymphadenectomy*. During this surgical procedure, both the kidney and the lymph nodes closest to the tumour are removed.



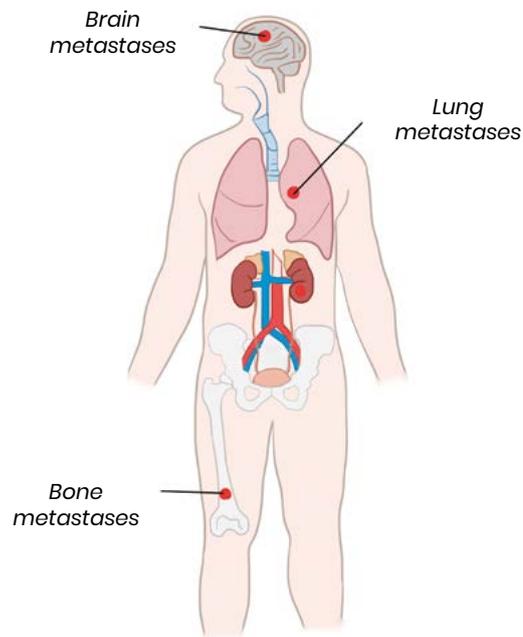
Ablation therapy

3.2. METASTATIC KIDNEY CANCER

At this stage of the disease, the tumour has spread and is in both the kidney and neighbouring or distant organs. As in the previous stage, there are several treatment options that we explain in more detail below.

> Cytoreductive surgery and resection of metastases

This type of surgery, also called **cytoreductive nephrectomy**, aims to reduce the size of the tumour as much as possible. Sometimes other neighbouring organs such as the spleen, pancreas or part of the intestine need to be removed in addition to the kidney. Not everyone can



Metastatic kidney cancer

benefit from this surgery, it will depend on factors such as their general health and the extent of the metastasis. Reductive surgery is combined with other treatment options.

A **metastasectomy** is a surgical procedure that aims to **remove these tumours**. It is only suitable in very specific cases: when there are only a small number of metastases and they are localised to one area.

> Targeted therapy

These are drugs that act on therapeutic targets. In other words, they are able to identify certain parts of the cancer cell or the vessels feeding the tumour and block the growth or spread of the cancer. In most cases, targeted therapy can reduce the disease or prevent it from spreading, but not cure it.

- **Anti-angiogenic therapy** is a type of targeted therapy that focuses on stopping angiogenesis, which is the process by which new blood vessels form. A tumour needs blood vessels to receive nutrients* that help it to grow and spread. This therapy deprives it of food and oxygen, slowing the growth of the tumour and even reducing its size.
- **mTOR inhibitors** are another type of targeted therapy. They are drugs administered to target a protein called mTOR, which helps tumour cells to grow. Inhibiting this protein slows or inhibits the growth of kidney cancer.

> Immunotherapy

This biological therapy harnesses the ability of a person's immune system to fight the disease. It consists of **stimulating the immune response** so that the body can detect and destroy tumour cells by itself. This can stop or slow their growth, or prevent the cancer from spreading to other parts of the body. The goal is always to help the immune system become more effective at killing cancer cells.

> Symptomatic and palliative treatment

Alongside a specific treatment for kidney cancer, it is important to treat other symptoms caused by the disease. For example, painkillers are used to relieve pain caused by bone metastases (inside the bones) and radiotherapy is used as a palliative treatment.

Bisphosphonates are also useful for treating bone metastases as they help to reduce complications caused by the effects that tumours have on bones.

> Radiotherapy

This type of cancer therapy uses high-energy radiation to kill cancer cells. For kidney cancer, conventional radiotherapy on the primary tumour does not play a significant role and is only used in cases where the disease is localised to the kidney and there are unfavourable medical conditions that mean surgery is not recommended. It can also be administered after a radical nephrectomy in order

to increase locoregional control in patients with poor prognostic factors.

However, modern radiotherapy techniques and stereotactic techniques in particular: stereotactic radiosurgery (SRS) and stereotactic body radiotherapy (SBRT), used to target small primary tumours in the kidneys that cannot be surgically removed, as well as metastasis (bone, lung, lymph nodes, etc.), are achieving high percentages of local control and an increase in the survival rate.

NOTE: Although **chemotherapy*** is helpful in treating most cancers, kidney cancer is often resistant to this treatment, meaning it does not work as well in terms of stopping or slowing tumour growth.

3.3. CLINICAL TRIALS

The therapy options available for people with kidney cancer are providing ever better results and this is thanks to advances in research. Clinical trials are a fundamental part of research because they enable scientists to **find out how beneficial it is to incorporate a new treatment** (or combine treatments or use several back-to-back).

Knowing what studies are underway will help you to discover what the next steps will be to treat kidney cancer in the future and is also a **treatment option that your medical team may suggest while you have the disease.**

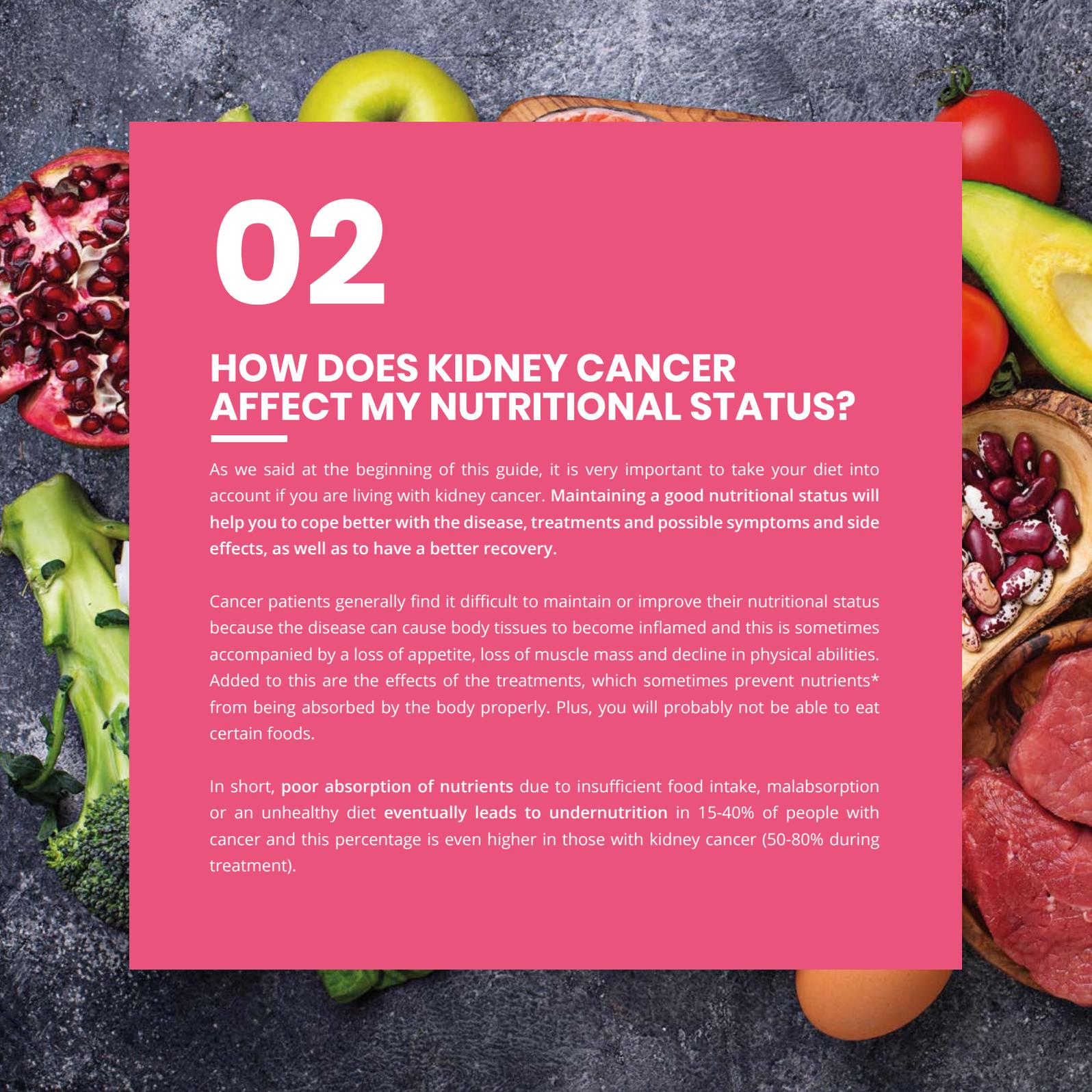




What is palliative care?

The main focus of palliative care is to improve the quality of life of people living with a serious or chronic disease. **It aims to prevent or treat the symptoms and side effects of the disease and treatments**, as well as to help and offer patients solutions to the emotional, social or spiritual difficulties that cancer may cause them and their relatives or carers.

- Palliative care is useful from the moment kidney cancer is diagnosed, during treatment or follow-up appointments and at the end of life. Consequently, it should not be understood as something that is only offered when the disease is at a very advanced stage.
- It may be offered at the same time as treatments that will cure or treat the cancer.
- It is provided by a multi-professional and interdisciplinary team with specific training, generally made up of experts in medicine, nursing, psychology and social work. Professionals from other specialties (physiotherapists, dieticians/nutritionists, etc.) may also join in order to provide personalised care to each person.
- Referrals to palliative care services are made by the healthcare team treating you or your local doctor.
- There are a wide-range of complementary palliative care services that can be provided in hospitals or at home. This decision will depend on the individual needs of each patient and it is important to note that each region of Spain manages palliative care in a different way.



02

HOW DOES KIDNEY CANCER AFFECT MY NUTRITIONAL STATUS?

As we said at the beginning of this guide, it is very important to take your diet into account if you are living with kidney cancer. Maintaining a good nutritional status will help you to cope better with the disease, treatments and possible symptoms and side effects, as well as to have a better recovery.

Cancer patients generally find it difficult to maintain or improve their nutritional status because the disease can cause body tissues to become inflamed and this is sometimes accompanied by a loss of appetite, loss of muscle mass and decline in physical abilities. Added to this are the effects of the treatments, which sometimes prevent nutrients* from being absorbed by the body properly. Plus, you will probably not be able to eat certain foods.

In short, **poor absorption of nutrients** due to insufficient food intake, malabsorption or an unhealthy diet eventually leads to **undernutrition** in 15-40% of people with cancer and this percentage is even higher in those with kidney cancer (50-80% during treatment).

**i****Malnutrition versus undernutrition**

Malnutrition and undernutrition are not synonymous concepts.

- **Malnutrition:** when the body does not have enough nutrients to function properly. This may be due to a poor diet or a lack or excess of certain nutrients.
- **Undernutrition:** a type of malnutrition associated with a lack of the essential nutrients, proteins and calories that our body needs to stay in balance. It is caused by poor absorption of nutrients for a number of reasons: eating too little or too small a variety of foods, having an imbalanced diet or not absorbing enough nutrients as a result of some diseases or medical treatments, such as cancer.

The consequences of this poor nutritional status may be: increased complications and infections, lower tolerance to treatments and a poorer quality of life. That is why it is important to take the best possible care of yourself, right from diagnosis: **maintain your body weight, make sure you eat and drink enough and do the right amount of exercise according to your needs and limitations.** This will help you to cope better with cancer therapy (for more information, see section 3: “Treatments for kidney cancer”, in chapter 1). It will also allow you to start, with the help of your healthcare team, taking early measures to monitor and improve your nutritional status so as to stop it from deteriorating.

1. HOW DO I KNOW IF I HAVE AN OPTIMAL NUTRITIONAL STATUS?

To find out if somebody with cancer has an optimal nutritional status, it is recommended that they take a **nutritional assessment**. The aim is to detect if they are malnourished and **analyse the risk of them becoming undernourished due to the treatments or the cancer itself**. It is also wise for them to assess their food intake and weight changes with their healthcare team in order to estimate their nutritional needs while they have cancer.

HOW IS A NUTRITIONAL ASSESSMENT CARRIED OUT?

Nutritional assessments determine whether a person is malnourished or at risk of becoming so. In other words, they calculate how well the person's diet is providing the amount of nutrients their body needs and identify whether they have any nutritional problems. **The aim is to start providing nutritional support or treatment early** to anyone who needs it, hence the importance of assessing a patient's nutritional status at diagnosis and continuing to do so while they are living with the disease.

To do this, your healthcare team will take into account the following:

- If you have **lost weight**, body fat or muscle mass, or have a build-up of fluid in your body.
- If you are experiencing symptoms such as a **loss of appetite** or have changed the amount and type of food you eat and the reasons why.
- **If you find it more difficult** to walk or **do everyday activities** such as getting dressed, washing, getting out of bed, etc.

Finally, you will undergo a physical examination and analysis in order to assess your general health and nutritional status. This will be based on the following information: your medical history; anthropometric measurements (your weight, height and body size); biochemical data (for example, the level of absorption or loss of certain nutrients), and any information you wish to share about your lifestyle, especially your diet and level of exercise.

Nutritional assessments can be carried out via a number of different **nutritional screening methods**, which are procedures that enable a person's risk of undernutrition to be calculated and analysed. **The objective is to assess their diet and improve their nutritional care.**

2. HOW DO I KNOW IF I AM UNDERNOURISHED?

Some symptoms that indicate a risk of undernutrition and can be seen as warning signs are: feeling dizzy, feeling weak when moving, pale face, hair loss, or swollen legs or stomach due to a build-up of fluid.

Your healthcare team will probably suggest using a nutritional screening tool to assess whether you are undernourished or at risk of becoming so. Some of these methods may include:

> Subjective global assessment (SGA) carried out by the patient

The SGA is a technique used to assess the nutritional status of somebody with cancer. It is based on a form (test) that is filled in by both the patient (the medical history section) and their healthcare team (who enter the data obtained after a physical and medical examination). In other words, it is a team effort between patients and professionals. This is the most widely used screening tool.

> Body Mass Index (BMI)

Calculating a person's BMI allows us to estimate if they have enough body fat and if their weight is within the normal range or, if not, whether they are underweight or overweight. It is calculated as follows:

$$\text{BMI} = \frac{\text{weight (kg)}}{\text{height}^2(\text{mts})}$$

For example, if somebody weighs 54 kg and is 1.65 m tall, they have a BMI of 19.83. Calculation: (54 kg)/(1.65 m)²

The optimum BMI for most adults is between 18.5 and 24.9.

BMI value	Range
<16	Severely underweight
16.00 - 16.99	Moderately underweight
17.00 - 18.49	Underweight
18.5 - 24.99	Normal weight
25.00 - 34.99	Overweight
30.00 - 34.99	Class I obesity
35.00 - 40.00	Class II obesity
40.00 - 49.99	Class III obesity (morbidly obese)
>50	Class IV obesity (extremely obese)

› Malnutrition screening tool (MST)

It is very important to identify if you have lost or are losing weight unintentionally.

The MST is a quick and easy-to-perform test based on unplanned weight loss and a lack of appetite that enables us to quantify this loss in a simple manner. You can do it yourself by completing the following table: circle the answers that best fit your situation and then add up the corresponding points. A score greater than or equal to 2 points indicates that you are likely to be at risk of undernutrition.

You can also find out if you are losing weight and body mass and thus get a rough idea of your nutritional status by weighing yourself on the same day every week before breakfast.

We encourage you to share the results of the last two tests we described when you next see your specialist so that you can find out the answers to any questions you might have. By doing so, you will be able to take the appropriate measures to adjust your diet in case your nutritional status is deteriorating.

PARAMETERS	
Have you recently lost weight unintentionally?	
No	0
I'm not sure	2
Yes, I have lost weight:	
Between 1 and 5 Kg	1
Between 6 and 10 Kg	2
Between 11 and 15 Kg	3
More than 15 Kg	4
I don't know how much	2
Are you eating unhealthily because you have no appetite?	
No	0
Yes	1
Total	

WHAT HAPPENS IF I AM UNDERNOURISHED?

If the nutritional assessment determines that you are undernourished or at risk of becoming so, your healthcare team will propose a **nutritional treatment or procedure** that will be planned according to your level of undernutrition, symptoms and general state of health and will take into account whether you have any other conditions (diabetes, high blood pressure, impaired liver function, etc.).

The **different nutritional procedures** are classified, depending on their complexity:

- › **Dietary advice:** a set of recommendations on what food to eat and medical advice to prevent or treat undernutrition. They are made by specialists in dietetics-nutrition, nurses, and hospital pharmacists in the nutrition department of each hospital. This is always the first option for treating nutritional problems and should be followed continuously while being treated for cancer.

- › **Oral nutritional supplements (ONS):** these are commercially-produced nutritional products that aim to supplement the diet and compensate for the calorie deficit and nutrient deficiency. There are several types and they are prescribed by a doctor.
- › **Artificial nutrition (enteral or parenteral):** nutrients are delivered through a tube directly into the gastrointestinal tract (enteral nutrition) or intravenously through a central venous catheter* (parenteral nutrition). Deciding which technique to use will depend on multiple factors related to your clinical situation at the time and the best one for you will be chosen.

As a general rule, dietary advice will be offered first and, if that is not enough, you will be asked to supplement your diet with oral nutritional supplements, unless there are contraindications. If you are unable to reach your requirements through oral diet alone, you will need to start receiving artificial nutrition.

3. WHAT CAN I DO TO IMPROVE MY NUTRITIONAL STATUS?

You need to eat well to feel better and follow the recommendations of your healthcare team, which will be adapted to your characteristics, clinical situation and the stage of your disease. As we mentioned earlier, **the nutritional status of people with cancer is a key factor in their clinical progress.** We suggest that, with the help of this guide and your team of specialists, you play a key role in this process and improve your nutritional status by eating a balanced diet. **You might ask yourself: how do I do it?**

In Spain, we are fortunate enough to have access to a great variety of foods that form part of the **Mediterranean diet.** Several studies have shown the **benefits of this diet because of the level of antioxidants it provides,** since it contains pulses, fruits, vegetables, whole grains, nuts, olive oil and animal products (in moderation). All of this makes it the most recommended diet for both preventing and treating cancer.

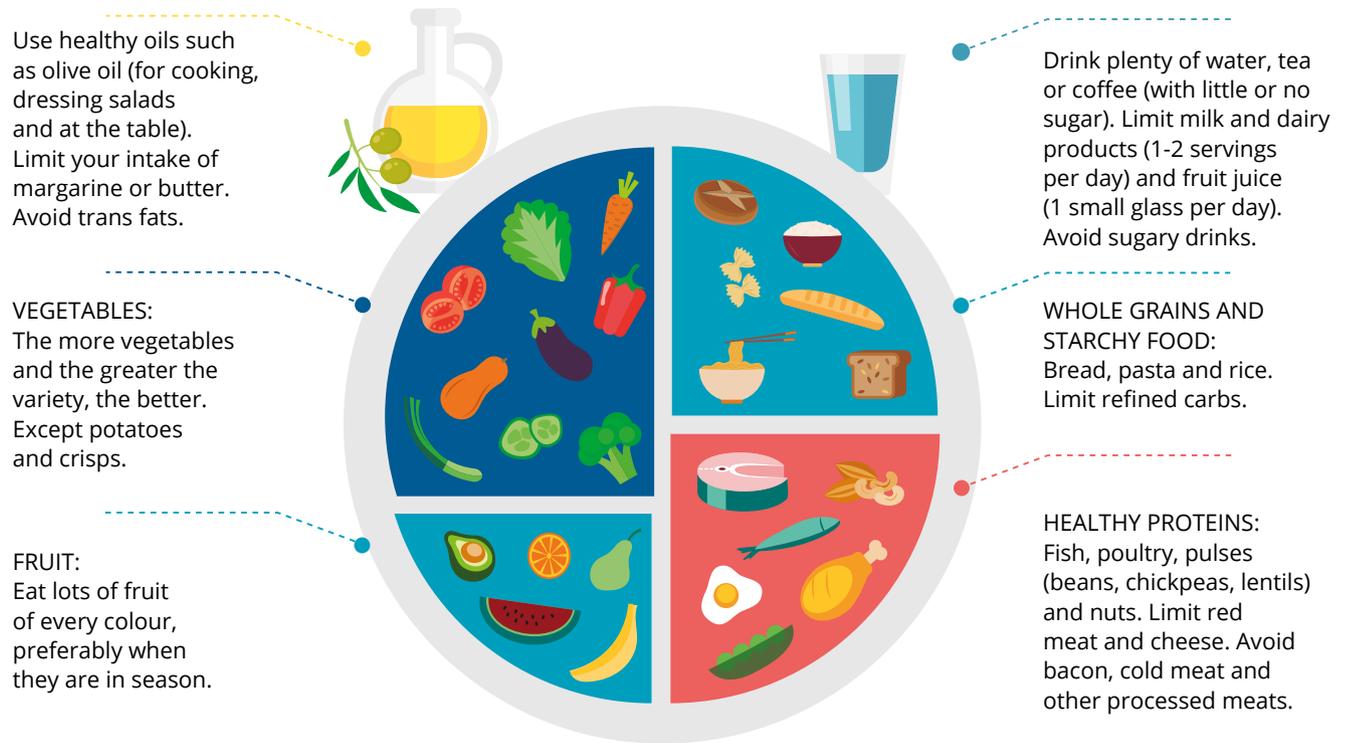
Generally speaking, **the best way to eat in order to have an optimal nutritional status is to include a wide variety of foods in our daily intake.** There is no such thing as a "miracle food" or "anti-cancer food." No single ingredient contains all the essential nutrients that our body needs, so we must include them all in our diet (fruits, vegetables, pulses, grains,

nuts, dairy products, meat, fish and eggs), in the right amount.

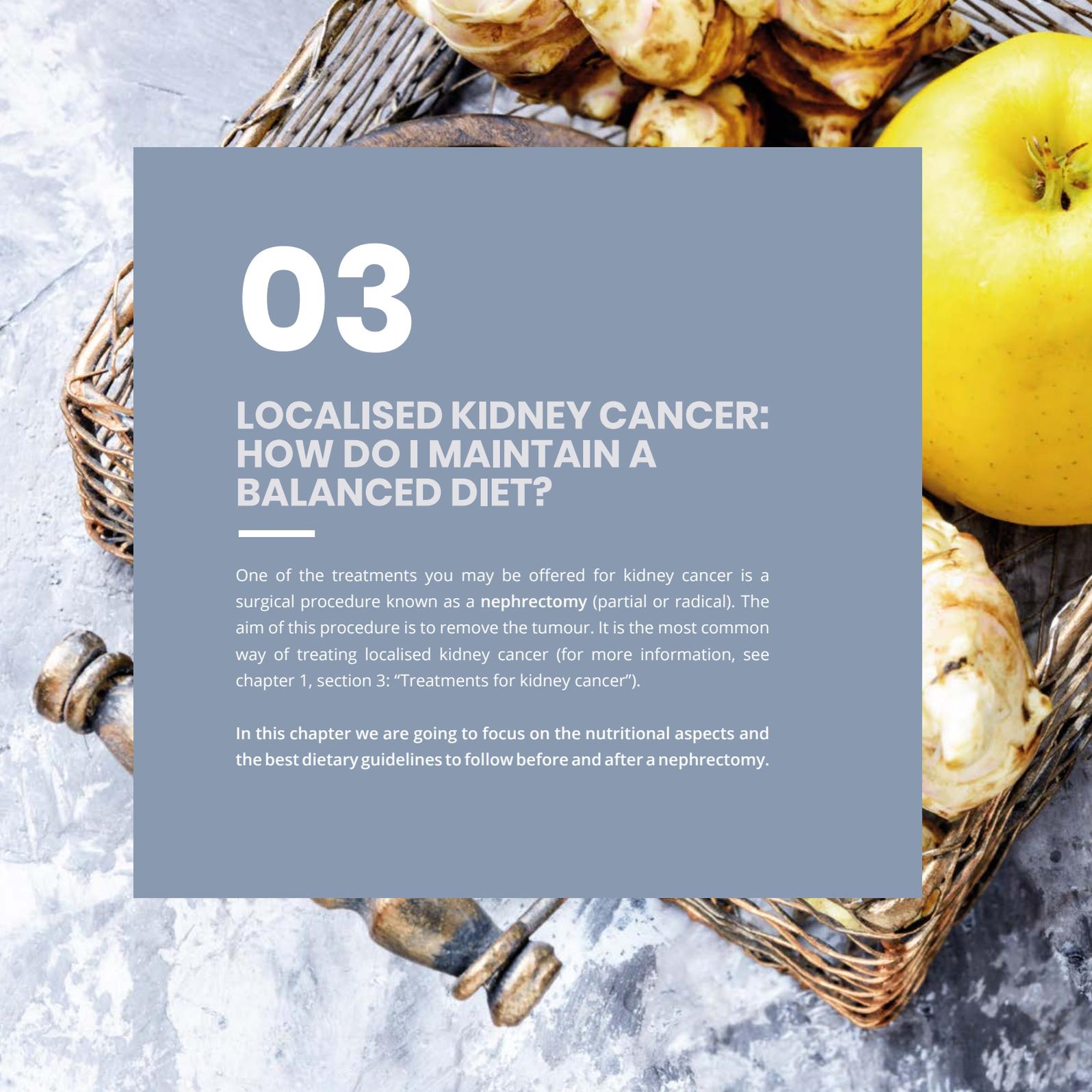
The **Healthy Eating Plate** diagram on the opposite page, created by the Harvard School of Public Health, **will help you to create healthy, balanced meals.** We recommend that you stick a copy on your fridge. That will make it easier to prepare healthy dishes and stay in good health.

Although be aware that these are general recommendations that apply to everyone. For that reason, we provide some more specific information in the next two chapters about what nutritional aspects and dietary guidelines you should take into account either before and after surgery (see chapter 3: "Localised kidney cancer: How do I maintain a balanced diet?") or when the disease has reached an advanced stage and is metastatic* (chapter 4: "Advanced kidney cancer: How do I maintain a balanced diet?").

We invite you to keep reading and improve your wellbeing through your diet.



Healthy Eating Plate (Harvard School of Public Health)



03

LOCALISED KIDNEY CANCER: HOW DO I MAINTAIN A BALANCED DIET?

One of the treatments you may be offered for kidney cancer is a surgical procedure known as a **nephrectomy** (partial or radical). The aim of this procedure is to remove the tumour. It is the most common way of treating localised kidney cancer (for more information, see chapter 1, section 3: “Treatments for kidney cancer”).

In this chapter we are going to focus on the nutritional aspects and the best dietary guidelines to follow before and after a nephrectomy.



1. MY DIET BEFORE SURGERY

Our general health before starting treatment and our nutritional status (e.g. if we are undernourished or anaemic) can influence the prognosis of kidney cancer. Consequently, we recommend keeping track of this status from the moment of diagnosis (see chapter 2: “how does kidney cancer affect my nutritional status?”).

At this stage of the disease, when you are preparing for surgery, the goal is to maintain a good nutritional status and a stable weight. This can be achieved by adopting healthy lifestyle habits. We recommend the following:

- If you are at risk of becoming undernourished, your healthcare team will propose a strategy (dietary advice) to boost your calorie, protein or overall food intake by adapting your diet. If necessary, you will be asked to take oral supplements or use other methods to boost your nutritional status before surgery. This strategy will be accompanied by a clinical check-up and analysis before the procedure.
- If you have been diagnosed with undernutrition and you have other illnesses such as diabetes, Parkinson’s, chronic kidney disease, etc., or you have impaired liver function or high blood pressure, you should follow the recommendations of your healthcare team. Bear in mind that in the days leading up to the nephrectomy, your healthcare team will provide you with guidelines to follow until the day of the operation.



- **If you have a good nutritional status, you should do the following before your nephrectomy operation:**

- » Eat a healthy, varied and balanced diet.
- » Eat four to five meals a day.
- » Include a wide variety of foods in your meal plans, preferably those in season. It is important to maintain a balanced diet as a whole, without focusing on any particular food.
- » Ensure that you stay well-hydrated (drink between one-and-a-half and two litres of water per day).
- » Exercise daily, within your limits.
- » Steam, bake, grill, cook en papillote or gently stew food. Avoid fried, battered and breaded foods. We do not recommend barbecuing food as this method of cooking food at a high temperature directly over flames causes compounds to be released that are detrimental to our health.
- » Season dishes with spices or aromatic herbs instead of salt and limit your consumption of processed food (food made using processing

techniques such as frozen, pre-cooked or tinned food), as well as fast food and ready meals (for more information, read the following information boxes: "Why should I cut down on salt and processed food?" and "Tips for adding flavour to your dishes without using salt").

- » Do not smoke or drink alcohol.





Why should I cut down on salt and processed foods?

When we have a kidney disease such as kidney cancer, our body may be unable to remove sodium properly so it can accumulate inside us. Excess sodium can cause extra fluid retention (hence swollen arms or legs), weight gain, high blood pressure and even difficulty breathing. That is why we recommend reducing the amount of salt in your diet.

The salt we consume daily through food comes from three sources:

1. The food itself (natural salt).
2. The salt we add when cooking or at the table, e.g. sodium chloride (common table salt).
3. Processed foods. These are our main source of salt: they provide 72% of the total amount of salt we eat.

The World Health Organization (WHO) recommends reducing our salt intake to less than 5g per day. This means that you should limit your consumption of:

- Snacks: crisps, popcorn, crackers, salted nuts, etc.
- Tinned food: tinned fish, vegetables or soup.
- Processed foods: processed meats (hamburgers, sausages, etc.) and cured and smoked meats.
- Pickled food: olives, pickled onions, gherkins, etc.
- Seafood and shellfish.
- Cured cheeses.
- Refined breakfast cereals.
- Ready-made cooking sauces, condiments and instant soups.
- Concentrated meat or fish stock cubes.
- Dried seaweed.

One **tip** is to look at product labels when shopping and pick those that say "low in salt."

i

Tips for adding flavour to your dishes without using salt

Herbs and spices: these can be used alone or in combination. The most common are: garlic, parsley, bay leaves, rosemary, oregano, basil, nutmeg, paprika, thyme, mint, vinegar, etc. If using dry herbs, we recommend adding them during the last few minutes of cooking.

Make flavoured oils: to enhance the flavour of salads, vegetables or any meat or fish you are cooking. We recommend using extra virgin olive oil (EVOO). We suggest using one of the following two ways of flavouring oils:

- Leave the ingredients (herbs or spices) to steep or infuse the oil for three to four weeks.
- Heat the oil in a bain-marie with the aromatic herbs or spices (for 30 minutes without letting it boil).

Note: *in both cases, the oil should be stored in the same way as normal oil - in the cupboard away from places that are exposed to high temperatures. The expiry date would be the same as that of the original oil before flavouring.*



What should I take into account before surgery if I have other conditions as well as kidney cancer?

Age and any other diseases (diabetes, Parkinson's, etc.) or conditions (impaired liver function, high blood pressure, etc.) can make people more vulnerable. These factors are also often associated with nutrient malabsorption* problems or deglutition* (swallowing) difficulties, which in turn contribute to a deterioration in their nutritional status and increased risk of undernutrition. Anybody who is about to undergo surgery should take all of the above into account and continue to do so after the operation and while they have the disease.

If you find yourself in one of these situations, keep following the diet recommended by your healthcare team and ask if you need to incorporate any new recommendations or make any changes to your diet during this stage before the nephrectomy.

If you have chronic kidney disease or renal impairment (your kidneys are not able to filter your blood properly to remove toxins and other waste products), **read the recommendations in section 3** ("What changes should I make to my diet if I also have chronic kidney disease?").

2. MY DIET AFTER SURGERY

The length of time that patients stay in hospital after a nephrectomy varies from one night to one week depending on the type of surgery performed (partial or radical), the technique used (laparoscopic or open surgery) and their general health. Talk to your surgical team about your estimated recovery time so that you can plan your personal, family or professional life on those days.

In most cases, it takes six to eight weeks to fully recover after surgery. During the first few days you may feel pain in your abdomen or on the side where the operation was performed or, if the surgeons used the laparoscopy technique, sometimes in your shoulder due to the gas used to inflate the abdomen during the procedure. The area around the wound may also be red or bruised. Remember that you need to keep the area dry and protected for it to heal properly: have showers instead of baths and follow the instructions given by your healthcare team on cleaning and caring for the wound.

After a nephrectomy, whether radical or partial, most kidneys continue to function as normal. However, sometimes they are impaired and there is a risk of developing chronic kidney disease (decreased kidney function). We explain this in more detail in section 3 of this chapter.

Before leaving the hospital, your healthcare team will tell you if you need to follow any specific guidelines to help you recover, or if you need to limit or make any changes to your diet or daily activities. They will also tell you what medication you need to take and explain how the follow-up appointments are going to work. As a general rule, you should not drive or do any strenuous activities or heavy lifting for the first few weeks. **Most people are able to return to their normal routine and activities eight weeks after surgery.**

How can I improve my diet after a nephrectomy?

In this next section we will provide you with some information and practical advice for this stage immediately after the operation. **If you have any questions, ask your healthcare team.**

After surgery, during the post-operative period, it is recommended that you introduce food as early as possible. The transition from a liquid diet to a semi-liquid, soft and finally basal* or normal diet is carried out according to the usual hospital model with the guidance and help of healthcare staff. If, for some reason, patients do not achieve their target nutritional status through this model and their intake is less than 60% of the recommended amount, they will be given **energy-protein supplements** to add to their diet and take between meals, e.g. oral supplements that improve

potential post-surgical infectious complications. In some cases, these patients can be discharged from hospital and go home, where they will continue taking their oral supplements for a few months, depending on their clinical progress.

Bear in mind that some people's nutritional status is affected after a nephrectomy, putting them **at risk of malnutrition or undernutrition**. If this has happened to you and you do not have chronic kidney disease (for more information see section 3 of this chapter), **we suggest the following:**

General recommendations:

- › Eat 5-6 small meals every 2-3 hours, even if you don't feel hungry, although try to avoid feeling full. There are no set meal times so you can take advantage of when you have the biggest appetite.
- › Preferably eat at the same time as others. Serve portions on small plates and remove each plate from the table before starting on the next.
- › Ensure you always have your favourite low-volume, high-calorie foods nearby.
- › Vary your meals and make them look attractive by using different colours and textures of food.
- › Add spices to enhance flavour.
- › Exercise before meals to increase your appetite.

During the recovery phase, we recommend setting yourself achievable goals based on what you are physically able to do when you start exercising again.

Dietary recommendations:

- › Drink fruit or cereal smoothies made with whole milk, ice cream or yoghurt. You could add fruit, honey, nuts, seeds or cream.
- › Add cheese to sandwiches, pasta or meat pies.
- › When making purées, soups or creamy soups add: extra virgin olive oil, potato, cornflour, bread, rice or grated cheese.
- › Increase your consumption of extra virgin olive oil. You can pour it on bread, toast and purées. You could also use cream cheese, butter, nut cream or avocados.
- › Lightly fry or sauté vegetables or cook them in sauces such as bechamel, mayonnaise, cocktail or hollandaise sauce.
- › Cook pasta, chicken, meat, fish and turkey dishes in different sauces.
- › Dip fruit in syrup before eating.

Finally, we offer the following:

More specific recommendations:

If you have lost muscle mass (protein malnutrition) because of undernutrition:

- Add sliced eggs to salads, vegetables, stews, soups, pasta and potatoes. And pasteurised egg to mashed potatoes or vegetables.
- Add meat and fish to omelettes, soufflés, sandwiches, vegetables and casseroles.
- Use textured vegetable protein to make sauces, stews or stuffing.

If you do not know your current nutritional status, we encourage you to speak to your healthcare team.



We propose a number of recipes in this section that you can adapt to your specific situation and liking.

To make it easier for you to adjust your diet after you have been discharged from hospital, the **following pages** contain a **table with the recommended portions** for each food group (Portion Guide Table 1) and their equivalent measurements. There are also two **weekly meal plans** (Plans 1 and 2) that you can adapt to suit you and your day-to-day life and combine with the recommendations made by the hospital.



PORTION GUIDE TABLE 1

· For people with kidney cancer who do not have impaired kidney function

	Number of portions	Portion size (raw and net)	Equivalent measurement	Practical advice
 <p>STARCHY FOODS (bread, pasta, rice, potato and other starchy foods)</p>	4-6 portions per day	Bread: 30-60 g	1-2 slices	Choose wholemeal instead of white bread
		Rice or pasta: 50-80 g uncooked 150-200 g cooked	1 standard bowl	
		Breakfast cereal: 20-40 g	2-3 tablespoons	Do not eat any shop-bought pastries and cakes
		Potatoes: 150-200 g	1 medium potato or 2 small potatoes	
 <p>VEGETABLES AND LEAFY GREENS</p>	2 or more portions per day	150-250 g	1 bowl of mixed salad 1 bowl of cooked vegetables 1 large tomato	At least 1 of these should be eaten raw. Suggested cooking techniques are baked, grilled, or steamed
 <p>FRUIT</p>	3 or more portions per day	150-200 g	1 medium piece, 2 small tangerines, 3 plums, 1 slice of melon, 1 cup of cherries or strawberries	It is better to eat fruit whole instead of drinking fruit juice. At least 1 of these should be rich in antioxidants: citrus fruits, kiwi, blueberries, etc.
 <p>NUTS</p>	3-7 portions per week	20-30 g	1 fistful without shells	We recommend plain nuts with no salt or sugar
 <p>PULSES</p>	2-4 portions per week	60-80 g raw	1 standard bowl	If using tinned pulses, ensure to wash off the liquid from the tin first
		150-200 g cooked	2-3 small saucepans with stock	



PORTION GUIDE TABLE 1

· For people with kidney cancer who **do not have impaired kidney function**

	Number of portions	Portion size (raw and net)	Equivalent measurement	Practical advice
 MEAT	3 portions per week	100-150 g	1 medium fillet 1 medium chicken thigh 1 chicken breast	Prioritise white meats (chicken, turkey, pork loin). Only eat cold meats on occasion, red meat a maximum of 2 times a week and try to avoid processed meats
 FISH	3-4 portions per week	100-150 g	1 medium fillet, 1 medium portion, 1 medium slice	Cook well before eating (at least 60° in the centre or otherwise frozen at -20° for 5 days)
 EGGS	3-5 portions per week	65-100 g	1 large egg, 2 small or medium eggs	Suggested cooking techniques are griddle or boiled, or using them to make an omelette
 DAIRY PRODUCTS	2-3 dairy products per day	Milk: 200-250 ml	1 glass of milk	Choose low-fat or fat-free dairy products. Avoid full-fat dairy products and flavoured yogurts
		Yoghurt: 125 ml	1 yoghurt	
		Cured/semi-cured cheese: 40-60 g	2-3 slices of cheese	
		Fresh cheese: 80-125 g	1 individual tub	



PORTION GUIDE TABLE 1

· For people with kidney cancer who **do not have impaired kidney function**

	Number of portions	Portion size (raw and net)	Equivalent measurement	Practical advice
 OLIVE OIL	3-4 portions per day	10 ml	1 medium tablespoon	Adjust portion sizes according to the amount of exercise you are doing. We recommend using extra virgin olive oil for both cooking and dressing dishes
 SUGARS: sweets and sugary drinks	Very rarely			Not recommend eating any products with "added sugars"
 PASTRIES, SPREADS AND SALTY SNACKS	Not recommended			Avoid eating these because of their high saturated fat, trans fats, simple carbohydrates and salt content
 WATER	1-2 litres of water/day (depending on age and individual circumstances)		4-6 glasses per day	Water, herbal teas, fruit, fresh vegetables, soups, gazpacho and purées or cream of vegetable soups will help ensure you are properly hydrated



MEAL PLAN 1

· Meal plan options for people with kidney cancer who are not undernourished after surgery

	Mon.	Tue.	Wed.	Thur.
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
BREAKFAST	Semi-skimmed milk Toast and jam with no added sugars Fruit	Semi-skimmed milk "María" style plain biscuits Fruit	Semi-skimmed milk Bread with fresh cheese Fruit	Semi-skimmed milk Toast with oil Fruit
MID-MORNING SNACK	Yoghurt	Mini sandwich (lettuce, tuna, hard-boiled egg, etc.)	Granola bar Ginger tea	A handful of nuts
LUNCH	Lentils with vegetables Veal meatballs in a tomato sauce Fruit	Chard and potato Grilled hake with lemon Fruit	Tomato and tuna macaroni Grilled chicken breast with lettuce Fruit	Chickpeas and spinach Scrambled eggs with prawns and wild asparagus Fruit
AFTERNOON SNACK	Toast with a slice of cold turkey Ginger tea	Yoghurt with nuts Ginger tea	Semi-skimmed milk Biscuits	Granola bar Ginger tea
DINNER	Butternut squash, carrot and almond purée Tuna and cheese omelette Seasonal fruit	Fish soup Sliced ham and cold or grilled cheese Seasonal fruit	Spinach in an almond sauce Sardines in low-salt olive oil (tinned) Seasonal fruit	Leek, courgette, potato and almond purée (See recipe) Chicken sausages with carrots Seasonal fruit
SUPPER	Yoghurt			

	Fri.	Sat.	Sun.	
	FRIDAY	SATURDAY	SUNDAY	
	Semi-skimmed milk "María" style plain biscuits Fruit	Semi-skimmed milk Tomato salsa on toast Fruit	Semi-skimmed milk Homemade pastry Fruit	BREAKFAST
	Serrano ham on toast Ginger tea	Yoghurt	Slice of Spanish omelette Ginger tea	MID- MORNING SNACK
	Green beans and potatoes Cod with salsa verde (see recipe) Fruit	Clams with starflowers Roast chicken and potatoes Fruit	Vegetable paella Whiting in salsa verde Fruit	LUNCH
	Yoghurt and jam with no added sugars	Lean serrano ham on toast Ginger tea	Granola bar Ginger tea	AFTERNOON SNACK
	Vegetable soup with finely diced ham Cheese omelette Seasonal fruit	Mixed vegetables Grilled swordfish in pesto Seasonal fruit	Vegetable noodle soup Turkey cutlets with peppers Seasonal fruit	DINNER
	Yoghurt			SUPPER

**GENERAL
GUIDELINES FOR
THE MEAL PLAN:**

Eat 2 slices of wholemeal bread with lunch and dinner.

The recommended portion sizes are listed in "Portion Guide Table 1."

You could increase the amount of herbal teas you drink per day to help ensure you are properly hydrated.



MEAL PLAN 2

Meal plan options for people with kidney cancer who are at risk of undernutrition after surgery

	Mon.	Tue.	Wed.	Thur.
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
BREAKFAST	Whole milk Toast with oil and a slice of cold ham Fruit	Whole milk Toast with oil and a slice of cold turkey Fruit	Whole milk Fresh cheese and quince jelly Fruit	Whole milk Toast with oil and a slice of cold pork Fruit
MID-MORNING SNACK	Greek yoghurt with nuts	Banana and hazelnut smoothie	Greek yogurt with jam	Toast with cottage cheese
LUNCH	Lentils with rice Veal meatballs in an almond sauce (see recipe) Fruit	Chard with potatoes and ham Hake in hazelnut sauce Fruit	Tomato, tuna and hard-boiled egg macaroni Grilled chicken breast with peppers Fruit	Cod and chickpeas Scrambled eggs with mushrooms and prawns Fruit
AFTERNOON SNACK	Mini cheese sandwich Homemade smoothie	Mini pork sandwich Homemade smoothie	Mini ham sandwich Homemade smoothie	Mini tuna sandwich Homemade smoothie
DINNER	Butternut squash, carrot, potato and cheese purée Tuna omelette Fruit	Fish soup with a hard-boiled egg Ham croquettes Fruit	Spinach with raisins and pine nuts Sardines in low-salt olive oil (tinned) Fruit	Leek, courgette, potato and almond purée (See recipe) Chicken sausages Fruit
SUPPER	Yoghurt with biscuits or a homemade pastry			

Fri.	Sat.	Sun.	
FRIDAY	SATURDAY	SUNDAY	
Whole milk Toast with butter and jam Fruit	Whole milk Toast with fresh cheese and jam Fruit	Whole milk Toast with oil and brown sugar Fruit	BREAKFAST
Toast with oil and cheese	Greek yogurt with banana	Banana and strawberry smoothie	MID- MORNING SNACK
Couscous with vegetables and a hard-boiled egg (see recipe) Grouper fish with fried vegetables Fruit	Clams with starflowers and rice (see recipe) Roast chicken and potatoes Fruit	Fish paella Stewed veal and vegetables Fruit	LUNCH
Mini turkey sandwich Homemade smoothie	Mini serrano ham sandwich Homemade smoothie	Mini pork sandwich Homemade smoothie	AFTERNOON SNACK
Vegetable soup with diced ham Spanish omelette Fruit	Mixed vegetables with egg and ham Grilled swordfish Fruit	Vegetable soup with a hard-boiled egg Salmon en papillote (see recipe) Fruit	DINNER
Yoghurt with biscuits or a homemade pastry			SUPPER

GENERAL GUIDELINES FOR THE MEAL PLAN:

Eat 2 slices of wholemeal bread with olive oil with lunch and dinner.

The recommended portion sizes are listed in "Portion Guide Table 1."

If making a homemade smoothie as a snack, you should use whole milk or full-fat yoghurt and fruit, nuts, etc.

Follow the recommendations for people at risk of malnutrition and undernutrition in the "How can I improve my diet after a nephrectomy?" section.

3. WHAT CHANGES SHOULD I MAKE TO MY DIET IF I ALSO HAVE CHRONIC KIDNEY DISEASE?

Chronic kidney disease (CKD) is the **progressive and irreversible loss of kidney function**. When this happens, the kidneys become damaged and do not filter our blood properly. As a result, waste products can accumulate in our body and have a detrimental effect on our health.

Tests are regularly carried out in order to find out and monitor the progression of impaired kidney function: blood and urine tests, blood pressure test (which may rise in these cases), analysis of protein levels in urine and of renal filtration.

You may find yourself in this situation if you have previously been diagnosed with chronic kidney disease. If so, you will need to adapt the changes you have already made in your day-to-day life to suit your condition before and after surgery and follow the instructions of your medical team. If your kidney function has started to become impaired after surgery, you will be advised to change certain eating habits as part of your treatment.

When it comes to food, having chronic kidney disease does not mean that you cannot eat whatever you want. You simply **have to learn to change some eating habits in order to improve your nutrition and protect your health**. That is why it is important

to know how to choose the best foods for you. **Your healthcare team will advise you on what changes you need to make to your diet and how much fluid you need to drink** according to the severity of your chronic kidney disease, as you will have to continue making changes as your condition progresses.

In any case, we encourage you to eat a varied and balanced diet and to bear in mind the following:

General recommendations:

- › Eat enough protein, although avoid consuming it in excess as this could lead to proteinuria (a higher level of protein in urine than normal) or cause your CKD to advance.
- › Monitor the amount of sugar and salt you eat. The latter is especially important if you have high blood pressure as salt can raise blood pressure.
- › Avoid processed or semi-processed foods as they are very rich in phosphorus.
- › Limit your consumption of food with a high potassium content, such as vegetables, pulses, fruit, nuts, chocolate and ultra-processed food.



i

Why should I avoid food containing phosphorus?

Phosphorus is one of the minerals involved in bone formation. The kidneys are responsible for removing excess phosphorus from the body, but **if you have CKD, they may not be removing it properly.**

If you are in this situation, we suggest **monitoring your food intake according to the following recommendations:**

- Limit your consumption of dairy products, especially fat-free products. Choose low-fat where possible.
- We recommend eating the following meats: chicken, turkey, rabbit or lean pork. Avoid eating veal, "ternasco" lamb or horse meat.
- Recommended fish and shellfish are: ray, octopus, cod, horse mackerel, anchovy, tuna, sea bream, conger eel, perch, grouper, squid, baby squid, cuttlefish, palometa, mackerel, trout, salmon. Avoid eating: swordfish, European eel, spider crab, scallop, sole, angler fish, mussels, goose barnacles, oysters, sardines.
- Do not eat nuts.
- Do not eat whole grains.
- It is very important to limit your intake of ultra-processed foods, especially those that list the following additives in their ingredients:

E 338	Phosphoric acid
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E 339	Sodium phosphate
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E 340	Potassium phosphate
-------	---------------------

E 341	Calcium phosphate
-------	-------------------

E 343	Magnesium phosphate
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E 451	Triphosphate
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E 452	Polyphosphate
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i

Why should I limit my potassium intake?

One of the most common complications of CKD is the accumulation of potassium in the blood, as **less is excreted through urine**.

If you are in this situation, **you should bear in mind some specific dietary recommendations** in order to reduce the amount of potassium in your diet, including the following:

- You should eat a similar number of vegetables, greens and pulses as other people, as long as they have been cooked in one of the following ways:
 - Frozen vegetables or pulses: defrost them in water for 2-3 hours, drain well and cook them in fresh water.
 - Tinned vegetables or pulses: drain the liquid from the tin, wash them with tap water and then cook for 4-5 minutes.
 - Vegetables or greens that you are going to eat raw or cook without water (fry, bake, etc.): chop them and leave them to soak for 6-8 hours, changing the water twice.
- Avoid eating:
 - Nuts and any products containing them.
 - Chocolate and any products containing it.
 - Tinned food that is "low in sodium" as the additives give it a high potassium content.
 - Ultra-processed food.
 - We do not recommend eating raw tomato because it has a high potassium content.
- Other recommendations related to monitoring your potassium levels:
 - Do not use "low-sodium" salt because the sodium has been replaced with potassium.
 - Eat no more than 2 portions of fruit a day and choose those with a low potassium content: pears, apples, watermelon, mandarins or tinned fruit (after draining the juice).





We propose a series of recipes below that you can adapt to your situation.

To make it easier for you to apply these recommendations, the following pages offer some advice on how to create a diet plan if you have CKD: a table with the recommended portion sizes for each food group (Portion Guide Table 2) and the equivalent measurements to make it simpler, as well as an example weekly meal plan (Meal Plan 3) that you can adapt to suit your preferences. There are also some guidelines and advice on how to cook and eat more healthily at this time.

We also encourage you to contact organisations for people with kidney disease as they will be able to provide you with more information and advice on nutrition and other day-to-day issues.



PORTION GUIDE TABLE 2

• For people with kidney cancer and impaired kidney function

	Number of portions	Portion size (raw and net)	Equivalent measurement	Practical advice
 <p>STARCHY FOODS (bread, pasta, rice, potato and other starchy foods)</p>	6-8 portions per day	Bread: 30-60 g	1-2 slices	
		Rice or pasta: 50-80 g raw 150-200 g cooked	1 standard bowl	
		Breakfast cereal: 20-40 g	2-3 tablespoons	Avoid whole grains because of their high phosphorus content. Do not eat any shop-bought pastries and cakes
 <p>VEGETABLES AND LEAFY GREENS</p>	1-2 portions per day	150-250 g	1 bowl of mixed salad 1 bowl of cooked vegetables	If you have to monitor your potassium levels, use the cooking techniques recommended in the information box "Why should I limit my potassium intake?" in chapter 3
 <p>FRUIT</p>	2 portions per day	150-200 g	1 medium piece, 2-3 pieces of small fruit	If you have to monitor your potassium levels, choose fruits with lower potassium content (e.g. pears, apples, watermelon, etc.)
 <p>NUTS</p>	Not recommended			Avoid eating these because of their high phosphorus and potassium content
 <p>OLIVE OIL</p>	4-6 portions per day	10 ml	1 medium tablespoon	Adjust portion sizes according to the amount of exercise you are doing. We recommend using extra virgin olive oil for both cooking and dressing dishes



PORTION GUIDE TABLE 2

· For people with kidney cancer **and impaired kidney function**

	Number of portions	Portion size (raw and net)	Equivalent measurement	Practical advice
 PULSES	2-3 portions per week	60-80 g raw 150-200 g cooked	1 soup plate 2-3 small saucepans with stock	If you have to monitor your potassium levels, use the cooking techniques recommended in the information box "Why should I limit my potassium intake?" in chapter 3
 MEAT, FISH AND EGGS	1-2 portions per day	Fillet: 100-150 g	1 medium fillet	Adjust your intake to match your level of kidney function as instructed by your healthcare team. Choose white fish over oily fish. Choose white meats over red and processed meats.
		Eggs: 65-100 g	1 large egg or 2 small eggs	
 DAIRY PRODUCTS	1 portion per day	Milk: 200-250 ml	1 glass of milk	Preferably semi-skimmed. Avoid fat-free and enriched dairy products because of their high phosphorus content, as well as vegetable juice
		Yoghurt: 125 ml	1 yoghurt	
		Fresh cheese: 80-125 g	1 individual tub	
 SWEETS, PASTRIES, SPREADS AND SALTY SNACKS	Not recommended			Avoid eating these because of their high saturated fat, trans fats, simple carbohydrates, salt and phosphate additive content
 WATER	1-2 litres of water/day (depending on age and diuresis ¹)		4-6 glasses per day	If you are urinating less, you should drink enough fluids to match your urine output + 500 ml

¹Diuresis is related to the volume of urine we produce. In order to find out if you have this condition, we recommend that you talk to your healthcare team.



MEAL PLAN 3

· Meal plan options for people with kidney cancer and moderate - severe loss of kidney function

	Mon. MONDAY	Tue. TUESDAY	Wed. WEDNESDAY	Thur. THURSDAY
BREAKFAST	½ glass of milk "María" style plain biscuits	Yoghurt Toast with oil	Tub of fresh cheese 1 slice of homemade pastry	½ glass of milk Toast and jam
MID-MORNING SNACK	Toast with quince jelly	Toast and jam	Yogurt with jam	Mini serrano ham sandwich
LUNCH	Lentils with rice (one course meal) Fruit	"Arroz a la cubana" Cuban-style rice dish (one course meal) Fruit	Tomato and tuna macaroni (one course meal) Fruit	Chickpeas and spinach (one course meal) Fruit
AFTERNOON SNACK	Mini serrano ham sandwich	Toast with a slice of phosphate-free ¹ ham	Toast with oil	Yoghurt with biscuits
DINNER	Green beans and potatoes Grilled chicken breast Fruit	Fish soup Ham croquettes Fruit	Mixed vegetables Onion omelette Fruit	Broccoli John Dory fish in salsa verde Fruit

¹If bulk-buying, ask for the phosphate-free version. If sold in packaging, it should be labelled on the packet.

Fri.	Sat.	Sun.	
FRIDAY	SATURDAY	SUNDAY	
Yoghurt Toast with oil and a slice of phosphate-free ¹ ham	½ glass of milk Toast with oil and sugar	Tub of fresh cheese 1 slice of homemade pastry	BREAKFAST
Biscuits with jam	Toast and honey	Yoghurt with honey	MID-MORNING SNACK
Couscous with vegetables and a hard-boiled egg (one course meal) (see recipe) Fruit	Peas and ham (one course meal) Fruit	Fish paella (one course meal) Fruit	LUNCH
Toast with a slice of cold turkey	Mini ham sandwich	Toast and jam	AFTERNOON SNACK
Cream of courgette and carrot soup Grilled salmon Fruit	Lettuce and cucumber salad Turkey burger Fruit	Noodle soup Pepper omelette (see recipe) Fruit	DINNER

GENERAL GUIDELINES FOR THE MEAL PLAN:

Eat 1 or 2 slices of white bread with lunch and dinner. Do not use wholemeal bread.

The recommended portion sizes are listed in "Portion Guide Table 2."

Milk should be semi-skimmed and yoghurts should be natural or flavoured.

If you have to monitor your potassium levels:

- When cooking vegetables, greens and pulses, you should use one of the cooking techniques recommended in the information box "Why should I limit my potassium intake?" in chapter 3.

- No more than 2 portions of fruit per day. Some fruits with a lower potassium content are pears, apples, watermelon or tinned fruit (after draining the juice).

04

ADVANCED KIDNEY CANCER: HOW DO I MAINTAIN A BALANCED DIET?

Sometimes, and this may be the case for you, kidney cancer becomes more advanced or is already at an advanced stage when diagnosed, meaning that the tumour has spread outside the kidney.

In this chapter we are going to focus on the nutritional aspects and dietary guidelines recommended at this stage of the disease, taking into account the most common nutritional changes and potential side effects of your treatments that may interfere with your nutritional status, appetite or the way in which you eat. We will also discuss potential interactions between food and treatments.





1. WHAT CHANGES SHOULD I MAKE TO MY DIET IF I HAVE ADVANCED KIDNEY CANCER?

If you have advanced kidney cancer you may experience, either because of the cancer itself or because of the treatments you are receiving, **changes related to your diet** such as a loss of appetite, weight loss, anaemia, impaired liver function and even changes in your level of glycaemia (blood sugar level), in addition to other side effects such as mouth ulcers, dysphagia*, dysgeusia*, xerostomia, mucositis, vomiting, diarrhoea and constipation, all of which **may have an effect on your nutritional status**. For that reason, it is important to discuss these changes with your specialist and implement some nutritional care strategies early on to help maintain your weight before and during cancer treatment (for more information, see chapter 2, “How does kidney cancer affect my nutritional status?”).

The **most common nutrition goals at this stage** of the disease are, among others, to control disease-related symptoms, reduce the number of infections, improve tolerance to treatments, maintain independence and maintain or improve quality of life.

It is important to maintain your weight because undernutrition, a common problem for people suffering from cancer, especially when it is at an advanced stage (70–80% of cases), is often accompanied by a decrease in muscle mass, this slows down the healing process in tissues, reduces the body's response to treatments and increases side effects.

For this reason, if your specialist thinks you are not eating enough, they may prescribe nutritional supplements.





Bear in mind that **the most important thing is to prevent weight loss**, although it is also advisable to maintain a good body mass index (BMI) of between 18.5-24.9 kg/m² (as we mentioned in chapter 2, “How does kidney cancer affect my nutritional status?”).

The general recommendation is to follow a varied diet such as the Mediterranean diet and adapt it to your situation depending on your symptoms. This includes a good protein intake, which is essential at this stage of the disease in order to maintain muscle mass, which is so important for survival. Therefore, **remember to include protein-rich foods in at least two of your main meals every day.**

You may be wondering: **how will I know how best to tailor my diet to my particular situation?** To help you, we offer some **guidelines and advice in the next section, taking into account the most common side effects and complications** that interfere with our diet or nutritional status. Bear in mind that you may not experience all of the symptoms we describe.

2. HOW SHOULD I CHANGE MY DIET IN CASE OF...?

Whatever your situation, we recommend that you pay close attention to this **general advice**:

- > **Hand hygiene** is essential, especially when handling raw food, in order to prevent contamination. Cancer treatments can weaken your immune system and therefore cause more complications in case of food poisoning.
- > You should also take care of your **oral hygiene** by thoroughly brushing your teeth and tongue after every meal and before going to bed.

We offer some general and dietary **recommendations based on each symptom** so that it is easier for you to identify them.

Remember that there are a **series of recipes at the end of the chapter** that you can adapt to your specific situation.



MOUTH ULCERS OR DISCOMFORT IN THE MOUTH

Medication can inflame the digestive system, especially inside the mouth. This inflammation causes **redness or fluid build-up, small cuts or sores, pain and difficulty chewing or swallowing**.

General recommendations:

- Infuse room temperature water with thyme and use it to rinse your mouth.
- If you wear dentures, keep them clean and if you have any ulcers, do not wear your dentures until they have gone.
- Use a soft toothbrush.

Dietary recommendations:

- Avoid hot and heavily seasoned food.
- Avoid acidic food, spices and spicy food.
- Avoid hard and crunchy food. We recommend eating soft and juicy food.
- Do not drink alcohol or smoke.



MUCOSITIS

This is an **inflammation of the mucous membrane lining the inside of the digestive tract**, which runs from the mouth to the anus. The oropharynx (tongue, palate, side and back walls of the throat) and the oesophagus are the most affected areas.

General recommendations:

- Use a non-irritating toothpaste, soft toothbrush and dental floss for the gaps between teeth.
- Rinse your mouth with mouthwash.
- Eat 5-6 small meals a day, without skipping any, and most importantly, choose ingredients with a soft texture.
- Before meals, we recommended numbing your mouth with crushed ice, very cold water, jelly or ice cream to reduce pain.
- Do not eat meals when your mouth is really painful.
- Stay well-hydrated by drinking water, herbal teas, soups, eating ice creams or jellies. Avoid fizzy drinks.

- Food at room temperature or cold food will be easier to eat than hot food.
- Do not drink alcohol or smoke.



Dietary recommendations:

- Avoid foods that irritate the mucous membrane:
 - » Acidic food: oranges, lemons, kiwi, pickles, vinegar, tomatoes, cucumber.
 - » Savoury food: cold meats, chutneys, smoked food, tinned food.
 - » Spicy food: onion, garlic, pepper.
 - » Food with a grainy texture: salt crystals, vegetable fibres, fruit and vegetable seeds.
 - » Dry and hard food: nuts, biscuits, toast.
- Meals should be juicy and soft to help with chewing. Choose stews such as beef stew, fish in sauce, meatballs in sauce, stewed chicken, etc.
- Add mild and creamy sauces to meat and fish: béchamel sauce, mayonnaise, olive oil, mashed potato, cream, etc.
- If necessary, mash the first and second courses together to make them easier to chew and less painful to eat.



The following is an example weekly meal plan and advice for people who have mucositis (Meal Plan 4).





MEAL PLAN 4

· Meal plan options for people with advanced kidney cancer and mucositis

	Mon. MONDAY	Tue. TUESDAY	Wed. WEDNESDAY	Thur. THURSDAY
BREAKFAST	Semi-skimmed or whole milk, yoghurt (avoid Greek yoghurt) or fresh cheese Choose from: - Soft bread with olive oil, jam or quince jelly - “María” style plain biscuits moistened in milk or yoghurt - Homemade plain sponge cake (see recipe)			
MID-MORNING SNACK	Homemade smoothie (see recipe)			
LUNCH	Mashed chickpeas with a hard-boiled egg and vegetables (one course meal) Fruit salad	Creamy rice with vegetables Grilled John Dory fish with green peppers Banana	Cold watermelon soup (see recipe) Veal stew Apple pudding	Lentil and ham stew (one course meal) Pear
AFTERNOON SNACK	Homemade smoothie (see recipe)			
DINNER	Cream of mushroom soup Chicken breast with mashed potatoes Frozen yoghurt	Cream of carrot soup Tuna omelette Fresh cheese	Cold avocado and sweetcorn soup Peppers stuffed with prawns and tuna with homemade mayonnaise Frozen yoghurt	Cream of courgette soup Turkey and vegetable pudding (see recipe) Banana

RECOMMENDATIONS FOR MAKING AND DRINKING HOMEMADE SMOOTHIES:

- Make them by blending semi-skimmed milk or creamy yoghurt + fruit (avoid acidic fruit). You could also add biscuits, ground nuts, jam, honey, etc.
- Drink them straight from the fridge.

Fri.			Sat.			Sun.		
FRIDAY			SATURDAY			SUNDAY		
Semi-skimmed or whole milk, yoghurt (avoid Greek yoghurt) or fresh cheese Choose from: - Soft bread with olive oil, jam or quince jelly - “María” style plain biscuits moistened in milk or yoghurt - Homemade plain sponge cake (see recipe)						BREAKFAST		
Homemade smoothie (see recipe)						MID-MORNING SNACK		
Cod and vegetable risotto (one course meal) Frozen yoghurt		Spaghetti carbonara with ham (one course meal) Flan		Cuttlefish and squid fideuá with mayonnaise (one course meal) Homemade custard		LUNCH		
Homemade smoothie (see recipe)						AFTERNOON SNACK		
Microwaved vegetables Turkey and pepper pie Baked apple		Vegetable purée with potatoes Small chicken and apple skewers Peach in syrup		Cold consommé (see recipe) Jacket potatoes with minced meat Ice cream		DINNER		

- › Prepare different types of smoothies to avoid getting bored. Examples: yoghurt smoothie with blueberry jam; semi-skimmed milk smoothie + maria biscuits + ground almonds; semi-skimmed milk smoothie + banana + honey; yoghurt smoothie + peach jam.

GENERAL GUIDELINES FOR THE MEAL PLAN:

Eat 2 slices of soft bread with lunch and dinner.

Remember to follow the dietary recommendations in the section “How should I change my diet in case of...? Mucositis.”



DYSPHAGIA

This is the term for **difficulty with deglutition**, i.e. difficulty swallowing food safely and effectively. The following symptoms can help you to identify it.



DRIBBLING

Dribbling / unable to close mouth fully



FOOD REMNANTS

Food remnants on your tongue or in your mouth / swallowing in stages



FEVER 38°

Recurrent fever with no apparent reason



CLEARING YOUR THROAT

Feeling like your throat is blocked or frequently clearing your throat



CHOKING

Choking on food with certain consistencies



COUGH

Coughing during and after eating

If you have dysphagia, we recommend adapting the consistency of your meals according to its severity. Puréed food is the easiest to swallow. If you do not have severe dysphagia, you could opt for a soft or easy-to-chew diet without having to mash your food.

General recommendations:

- Eat in a calm and relaxed atmosphere.
- Eat with other people, in case of choking.
- Sit up, or as upright as possible, to eat. Try not to overstretch your neck.
- Eat 5-6 small meals a day.
- Take your time to eat, leaving a sufficient gap between each spoonful.
- Only eat a small spoonful at a time.
- Try not to let food accumulate in your mouth.
- Eat food when it is warm; avoid very cold and very hot food.
- Focus on the presentation and flavour of each dish: make sure they look attractive.

Dietary recommendations:

- If you need to blend your food, we suggest you split your meals in half:
 - » Blended farinaceous foods (starchy food), vegetables and protein-rich foods, with a maximum volume of 300 - 400 ml + blended fruit and/or dairy products with a maximum volume of 125 - 150 ml.
 - » First course of blended farinaceous foods and vegetables (150-200 ml) + second course of blended meat or fish with sauce + blended fruit and/or dairy products with a maximum volume of 125-150 ml.
- If you need to thicken a blended dish, you could add dextrinised cereals*, mashed potato, tapioca, cornflour, etc., or commercial thickeners that do not change the taste of the food.
- You should maintain good hydration by adapting everything you drink (water, juice, soup, herbal teas, milk, etc.) to the recommended viscosity using commercial thickeners that do not change the taste. You can also use thickened water*.
- Avoid:
 - » Two textures in one dish, e.g. soup with noodles, cereal with milk, rice with milk.
 - » Hard and crunchy food like toast, breakfast cereals, crisps, biscuits, etc.
 - » Food with skins or seeds like strawberries, kiwis, tomatoes, etc.
 - » Food with a stringy texture like leeks or asparagus.
 - » Rice, pulses or nuts which do not form a cohesive bolus* when chewed.
 - » Foods that release juice when bitten, such as tangerines, oranges or watermelon.





TASTE AND SMELL DISORDERS

Distorted taste perception (hypogeusia*, ageusia* or dysgeusia*) changes and limits your appreciation of the intensity of food flavours (metallic or bitter taste and difficulty in perceiving sweet tastes). Cancer treatments can also affect your sense of **smell**. As you know, the senses of taste and smell are closely related, so the following advice will help you in both cases.

General recommendations:

- Rinse your mouth with chamomile tea or bicarbonate of soda before eating.
- Chew sugar-free chewing gum or sweets between meals to avoid getting a nasty flavour in your mouth.
- Use wooden utensils for cooking and plastic cutlery for eating.
- Do not drink alcohol or smoke.

Dietary recommendations:

- Eating acidic fruits (orange, lemon, strawberry, kiwi, pineapple, etc.) can help to make the metallic taste disappear.

- Drink tea (with mint or lemon) or other herbal teas before, during and after meals to eliminate any strange flavours in your mouth.
- Add lemon juice or any other citrus juice to water if it does not taste nice.
- Meat and fish normally create the most unpleasant flavours, we recommend cooking them using the following techniques to mask the flavours:
 - » Macerate them in citrus juice, sweet and sour sauces or non-spicy spices.
 - » Add sweet or aromatic ingredients or condiments (dried fruits, compotes, jams, honey, etc.).
 - » Use them to make puddings, croquettes, pies, cannelloni, lasagne, etc.
- If, in addition to dysgeusia, your sense of smell has changed, avoid strong-smelling foods such as oily fish, cruciferous vegetables and fried foods, and eat cold or warm dishes that give off less odour.
- Make new or different dishes.



XEROSTOMY

This is when you have a **dry mouth** as a result of producing less saliva.

General recommendations:

- Go for regular dental check-ups.
- Use fluoride toothpastes. Avoid those that contain sodium lauryl sulphate.
- Do not spend a long time in places with a dry environment because of heating or air conditioning.
- Moisturise your lips and body in general.

Dietary recommendations:

- Drink at least 1.5 litres of water a day.
- Sip water frequently or use artificial saliva sprays.
- Drink water with meals to help deglutition* (action of swallowing).
- Do not eat very sugary, spicy, astringent, hot or cold foods.
- Avoid dry and thick foods.

- Eat acidic foods, such as fruit (pineapple or orange), between meals in order to increase saliva production.
- Include foods that are easier to chew in your diet: purées, creamy soups, puddings, smoothies, jellies or yoghurts.





NAUSEA AND VOMITING

If you are experiencing **nausea** (upset stomach) or **vomiting** (stomach contents travel back up into your mouth), the following recommendations will help you with both.

General recommendations:

- Keep your mouth fresh and clean.
- Avoid spending time in the kitchen while cooking.
- Eat in a well-ventilated room to reduce odours and help to feel fresher.
- Wear comfortable clothes; avoid tight-fitting clothes that press into your stomach.
- Sit or lay down for one hour after meals.
- Choose carbonated drinks such as sparkling water or soft drinks in order to reduce nausea.
- Eat food cooked using simple techniques (steaming, boiling or grilling) to facilitate digestion. Avoid fried food and stews with very fatty sauces as they give off a stronger smell and are more difficult to digest, which may make you feel more nauseous.
- Do not over-season with aromatic herbs or hot spices as they give off very strong odours.
- Avoid foods that have a strong smell when cooked, such as cabbage or cauliflower.
- Eat cold or room-temperature foods because they give off less odour than hot foods.

Dietary recommendations:

- Eat small meals: split your daily food intake into six or more meals throughout the day and chew well.
- Drink frequently but not while eating, especially on days when you are vomiting a lot.

- Increase your consumption of dry foods since they are easier to tolerate: toast, crackers, dried fruit, breadsticks, nuts, sweetcorn or rice cakes, popcorn, etc.

The following is an **example weekly meal plan for people with nausea and vomiting** (Meal Plan 5).





MEAL PLAN 5

· Meal plan options for people with advanced kidney cancer and nausea and vomiting

	Mon. MONDAY	Tue. TUESDAY	Wed. WEDNESDAY	Thur. THURSDAY
BREAKFAST	Decaf coffee with semi-skimmed or whole milk, yoghurt (avoid Greek yoghurt) or fresh cheese Choose from: - Toast with jam or quince jelly - "María" style plain biscuits - Homemade plain sponge cake (see recipe)			
MID-MORNING SNACK	Ginger, mint or chamomile tea Choose from: - Low-fat smoothie with seasonal fruit (see recipe) - Toast with a slice of cold meat (ham, serrano ham or turkey) - Nuts - Sweetcorn or rice cakes - Breadsticks with seeds or nuts - Yoghurt			
LUNCH	Pasta salad with a hard-boiled egg and tuna (one course meal) Fruit salad	Rice with vegetables (see recipe) Grilled John Dory fish with green peppers Banana	Tomatoes with mozzarella cheese Grilled veal fillet Orange	Chickpea salad with a hard-boiled egg, nuts and ham (one course meal) Pear
AFTERNOON SNACK	Ginger, mint or chamomile tea Choose from: - Low-fat smoothie with seasonal fruit (see recipe) - Toast with a slice of cold meat (ham, serrano ham or turkey) - Nuts - Sweetcorn or rice cakes - Breadsticks with seeds or nuts - Yoghurt			
DINNER	Cream of mushroom soup Chicken breast with roasted aubergine Yoghurt	Cream of carrot soup Scrambled eggs with wild asparagus Fresh cheese	Tapioca soup Peppers stuffed with prawns and tuna Yoghurt	Cream of courgette soup Grilled turkey breast with mushrooms Banana

Fri.		Sat.		Sun.	
FRIDAY		SATURDAY		SUNDAY	
Decaf coffee with semi-skimmed or whole milk, yoghurt (avoid Greek yoghurt) or fresh cheese Choose from: - Toast with jam or quince jelly - "María" style plain biscuits - Homemade plain sponge cake (see recipe)				BREAKFAST	
Ginger, mint or chamomile tea Choose from: - Low-fat smoothie with seasonal fruit (see recipe) - Toast with a slice of cold meat (ham, serrano ham or turkey) - Nuts - Sweetcorn or rice cakes - Breadsticks with seeds or nuts - Yoghurt				MID-MORNING SNACK	
Green beans and potatoes Roast chicken and potatoes Yoghurt	Special fried rice Baked sole Homemade flan	Lettuce salad Cuttlefish and squid fideuá Homemade custard	LUNCH		
Ginger, mint or chamomile tea Choose from: - Low-fat smoothie with seasonal fruit (see recipe) - Toast with a slice of cold meat (ham, serrano ham or turkey) - Nuts - Sweetcorn or rice cakes - Breadsticks with seeds or nuts - Yoghurt				AFTERNOON SNACK	
Chicory with a drizzle of extra virgin olive oil Ham omelette Mandarins	Gazpacho soup Turkey breasts with boiled potatoes Strawberries	Consommé (see recipe) Hamburger with red peppers Apple	DINNER		

GENERAL GUIDELINES FOR THE MEAL PLAN:

Eat 2 slices of bread with lunch and dinner.

Remember to follow the dietary recommendations in the section "How should I change my diet in case of...? Nausea and vomiting."



LACK OF APPETITE AND WEIGHT LOSS

Cancer and cancer treatments can cause **changes in eating habits and appetite**, such as a loss of appetite, otherwise known as anorexia*. If this continues for several days, it may lead to weight loss.

General recommendations:

- Eat in a calm and relaxed atmosphere with others.
- Serve portions on small plates and remove each plate from the table before starting on the next.
- Ensure you always have your favourite low-volume, high-calorie foods nearby.
- Focus on how dishes are presented and prepared. Vary your meals and make them look attractive by using different colours and textures of food.
- Exercise before meals to increase your appetite.

Dietary recommendations:

- Eat 5-6 small meals during the day, rather than three large meals.
- Avoid drinking with meals or taking small sips while eating in order to avoid feeling full quickly.



- Boost the amount of calories and protein in your meals by adding hard-boiled eggs, cheese, nuts, tuna or chicken.
- Add spices to enhance flavour.
- Eat your favourite foods whenever you want.



HIGH BLOOD PRESSURE (HBP)

This refers to **sustained high blood pressure**. Before starting any treatment for kidney cancer, it is important to know if you have high blood pressure because some treatments can aggravate it and you will probably need to increase your blood pressure medication. **We recommend talking to your healthcare team about your blood pressure readings and whether you need to follow any special guidelines for your specific situation.**

General recommendations:

- Do not smoke.
- Do light exercise.

Dietary recommendations:

- Limit the amount of salt in your diet. Refer to the information box “Tips for adding flavour to your dishes without using salt” in chapter 3 to help season your dishes.
- Try not to eat bread with salt. It is best to eat it without salt.
- Eat fruit and vegetables on a daily basis.
- Avoid saturated fats such as those in cold meats,

full-fat dairy products and fatty meats.

- Do not eat tinned vegetables, pulses or pickles (olives, gherkins or pickled onions).
- Eat fish 3 or 4 times a week.
- Steam, boil or grill food.
- Avoid eating:
 - » Processed food such as pastries and snacks.
 - » Nuts, if salted.
 - » Seafood and shellfish.
 - » Cured cheeses.
 - » Refined breakfast cereals.
 - » Sauces and instant soups.
 - » Concentrated meat or fish stock cubes.
 - » Dried seaweed.
- Do not drink alcohol, limit your consumption of tea and coffee and make water your main beverage.



DIARRHOEA

This is the **excretion of watery or loose stools**, sometimes accompanied by abdominal pain. Be aware that losing too much fluid can lead to dehydration and a loss of nutrients*.

Dietary recommendations:

- Eat six meals a day, without skipping any. They should be small and regular-every 2-4 hours.
- Maintain a good water and electrolyte* balance by drinking small sips of alkaline lemonade (see how to make it on the opposite page).
- Eat food when warm; avoid eating very hot food.
- Limit your intake of fatty foods (full-fat dairy products, fatty meat and sausages, oily fish, nuts, fried food, battered food).
- Avoid vegetables, especially those that cause flatulence (cabbage and leafy vegetables), raw fruit, greens, whole pulses, whole grains and fried food.
- Reduce the amount of coffee, alcohol and very sweet fruit juices you drink.
- If you eat chocolate, we recommend choosing products with 85% cocoa or higher.
- Avoid seafood.
- Do not eat food that has not been kept in the refrigerator.
- Steam, boil or grill food.
- Drink 1.5 to 2 litres of water and electrolyte* drinks per day. We recommend alkaline lemonade or oral rehydration salts available in pharmacies.

In case of diarrhoea, it is important to follow a progressive diet plan that introduces food gradually so that your digestive system can tolerate it. It should be done in the following stages:

STAGE 1. Fasting and rehydration

L For the first 24-48 hours, depending on the severity of the diarrhoea, stay on a liquid diet with alkaline lemonade (you should drink a minimum of 1.5 to 2 litres per day) in order to replace water and electrolytes through your oral diet. We recommend that you drink plenty of alkaline lemonade (in the following information box “How do you make alkaline lemonade?” we explain how to make it).

i

How do you make alkaline lemonade?

Ingredients: 1 litre of water, 2 tablespoons of sugar, ½ teaspoon of salt, ½ teaspoon of bicarbonate of soda, juice of one lemon

Mix well and drink regularly in small amounts: 1 glass every 1.5 to 2 hours.



**1.5 - 2
hours**

After 6-8 hours, if your body is tolerating the alkaline lemonade well, you can start to introduce other drinks:

- Rice water with a pinch of salt. Cook a handful of rice in plenty of water with a pinch of salt. Simmer until the rice has almost dissolved, strain and drink only the water.
- Light chicken consommé with no fat or fibre. Make a light chicken soup with no added fat, a pinch of salt and some vegetables (carrot, onion, leek and garlic). Strain and drink only the broth.
- Carrot water with a pinch of salt. Peel, chop and cook the carrots in plenty of water, with a pinch of

salt, until soft. Strain and drink only the broth.

- Astringent fruit juices such as pomegranate or blackberry, although strain well first.

STAGE 2. Restricted diet with solid foods

 After 24-48 hours of the liquid diet, you can start to introduce foods that are easy to digest and low in fibre. They should be boiled, stewed or grilled and no fat added when cooking. For example:

- Boiled white rice. Cook with a pinch of salt. You could add a peeled clove of garlic and a dessert spoon of extra virgin olive oil to enhance the flavour.
- Grilled low-fat chicken or turkey with a pinch of salt.
- Steamed white fish with a pinch of salt.
- Scrambled or hard-boiled eggs or an omelette. Preferably eat only the egg white.
- Steamed or boiled carrots.
- Cooked beetroot and steamed or boiled butternut squash.
- Low-salt, lactose-free ham.
- Toasted white bread.



- Pear or apple compote. Simmer the fruit in a little water, without adding sugar.
- Ripe banana.
- Quince.

STAGE 3. Reintroduce your normal diet

 **After a few days on the restricted diet (2-3 depending on your progress),** if you have improved and you have not had diarrhoea in at least 24 hours, you can gradually introduce new foods. For example:

- Boiled potatoes and carrots.
- Pasta (not wholemeal and without sauce).
- Entire eggs, either in an omelette or hard-boiled or scrambled.
- Homemade sponge cake with plain flour, no added dairy products and a low sugar content.
- Sugar-free yoghurt.

STAGE 4. Return to normal diet

At this point, your bowel activity should be back to normal. Test whether you can tolerate the following foods:

- Puréed vegetables: courgette, butternut squash, green beans, broccoli, etc.
- Blended fruit, without excess fibre and seeds.
- Boiled vegetables.
- Pulses. Start by mashing and straining them through a fine mesh sieve to remove most of the fibre. Start with lentils, which are the easiest to digest.
- Incorporate other cooking techniques and types of food until you are back to a healthy, varied and balanced diet.

NOT RECOMMENDED

While recovering from diarrhoea (mainly stages 1, 2 and 3), you should avoid eating anything that might irritate your intestine or that is difficult to digest. The table opposite lists the foods that may do this:

NOT RECOMMENDED WHEN YOU HAVE DIARRHOEA

Dairy products. You can introduce yoghurt in stage 3 because of its high probiotic (a type of good bacteria) content to see if your body can tolerate it.	Whole grains.
Fatty and processed meats.	Coffee.
Oily fish, due to their high fat content.	Sweet foods.
Raw fruit and fibre-rich vegetables.	Spices, except turmeric.
Acidic fruit juices.	Wine and other alcoholic drinks.
Pulses.	Sugary drinks.
Fats (butter, margarine, oil).	Vinegar and pickled or salted foods.
Fried foods and sauces.	Foods containing additives that cause irritation such as carrageenan, aspartame or monosodium glutamate, which are mainly found in 'diet' drinks and 'light' food products, as well as ultra-processed and ready-made food.
Nuts.	Foods containing artificial sweeteners such as sorbitol, mannitol, xylitol, erythritol and D-tagatose, e.g. sugary drinks, tinned food, desserts and jams.

The following is an example weekly meal plan in case of diarrhoea (one with astringent foods), that you can introduce in stage 4 (Meal Plan 6).



MEAL PLAN 6

· Meal plan options for people with advanced kidney cancer and diarrhoea in stage 4

	 MONDAY	 TUESDAY	 WEDNESDAY	 THURSDAY
BREAKFAST	Tea (breakfast, chamomile, lemon verbena) or probiotic yoghurt (if well-tolerated) - 2 or 3 slices of toast (white bread) - Apple or quince compote			
MID-MORNING SNACK	Tea (breakfast, chamomile, lemon verbena) or probiotic yoghurt (if well-tolerated) Choose from: - Bread with quince jelly or apple compote - Bread with 2 thin slices of ham			
LUNCH	Mashed potatoes and carrots Grilled whiting	White rice Grilled hake (see recipe)	Mashed potatoes and boiled beetroot Grilled chicken breast	Spaghetti in a carrot purée John Dory fish with courgettes
AFTERNOON SNACK	Tea (breakfast, chamomile, lemon verbena) or probiotic yoghurt (if well-tolerated) Choose from: - Bread with quince jelly or apple compote - Bread with 2 thin slices of ham			
DINNER	Cream of butternut squash soup Grilled chicken breast with boiled potatoes	Cream of carrot soup Egg white omelette with boiled potatoes	Rice stew Grouper fish cooked en papillote with courgettes	Chicken noodle soup Grilled turkey breast

Fri.		Sat.		Sun.			
FRIDAY		SATURDAY		SUNDAY			
Tea (breakfast, chamomile, lemon verbena) or probiotic yoghurt (if well-tolerated) - 2 or 3 slices of toast (white bread) - Apple or quince compote						BREAKFAST	<p>GENERAL GUIDELINES FOR THE MEAL PLAN:</p> <p>Eat 2 slices of toast with lunch and dinner.</p> <p>For dessert at lunch and dinner you can have a baked apple or pear, grated apple, apple/pear compote, ripe banana or quince.</p> <p>Remember that this meal plan is for Stage 4, as specified in the section “How should I change my diet in case of...? Diarrhoea.”</p>
Tea (breakfast, chamomile, lemon verbena) or probiotic yoghurt (if well-tolerated) Choose from: - Bread with quince jelly or apple compote - Bread with 2 thin slices of ham						MID-MORNING SNACK	
Rice stew Turkey breasts	Cream of butternut squash, potato and carrot soup Grilled chicken breasts		Boiled rice with carrots Turkey breasts with lemon		LUNCH		
Tea (breakfast, chamomile, lemon verbena) or probiotic yoghurt (if well-tolerated) Choose from: - Bread with quince jelly or apple compote - Bread with 2 thin slices of ham						AFTERNOON SNACK	
Cream of courgette soup Steamed hake with carrots	Rice soup Egg white omelette with boiled potatoes	Consommé (see recipe) John Dory fish with courgettes		DINNER			



CONSTIPATION

This term refers to **difficulty passing stools** (three or less bowel movements per week). Stools may be hard and dry and bowel movements are often painful. If you are in this situation we suggest the following:

General recommendations:

- Drink enough fluids to stay hydrated, mostly water but also herbal teas, soup, or fresh fruit or vegetable juices, especially those with pulp. You should drink two litres throughout the day.
- Chew food well.
- Try to go to the bathroom regularly and always at the same time. Spend as long as you need and relax and take deep breaths.
- Go to the toilet when you need to, do not postpone it.
- Exercise every day: walk for around 30 minutes a day as a minimum.
- Only take laxatives when prescribed by a doctor. Do not take them unless approved.

Dietary recommendations:

- When your stomach is empty, drink two glasses of lukewarm water with 1 dessert spoon of extra virgin olive oil, followed by a piece of fruit (a kiwi or a plum).
- Eat plenty of fibre-rich foods such as whole grains, vegetables, fruit, nuts and pulses.
- Include the following in your diet:
 - » Vegetables or greens: 2 portions/day, at least 1 of which should be raw.
 - » Pulses: 3 times a week.
 - » Whole grains: 6 portions/day. Such as bread, pasta, rice, breakfast cereals or biscuits.
 - » Fruit: at least 3 pieces per day. You should eat them raw and whole, leaving the skin on when possible and washing them first. Try not to substitute your minimum intake of 3 fruits a day with fruit juice.
- When making soups, purées or juice, do not strain them so as not to remove the fibre.

Below is a list of foods that are recommended, should be limited or are not recommended in case of constipation:

RECOMMENDED					
Skimmed milk, kefir or natural yoghurt with cereal, fresh cheese or cottage cheese	Chicken, turkey, beef fillet, lean veal, cured pork loin sausages, rabbit and horse meat	Serrano and boiled ham, cold slices of chicken and turkey	Oily and white fish	Boiled or poached eggs or an omelette	Whole grains and their derivatives
All kinds of vegetables and potatoes	Dried pulses	Fruit: fresh and dried	Nuts	Extra virgin olive oil	Herbal teas, water, soup, natural fruit and vegetable juices (with pulp)
SHOULD BE LIMITED					
Whole or semi-skimmed milk. Sliced semi-cured cheeses, liquid yoghurt and mousses				Fatty beef or lamb or stewing hen	Semi-fatty sausages: mortadella, salami, etc.
White, toasted and refined sliced bread	Refined cereals	Baked fruit, compote, fruit salad, jam	White or brown sugar, honey, treacle	Instant coffee, malt	Soft drinks and white or sparkling wine
NOT RECOMMENDED					
Concentrated and condensed milk	Fatty and fermented cheeses	Apple yoghurt, Greek yoghurt and yoghurt with cream		Very fatty game and duck meat. Offal and entrails	
Very fatty cold meats, patés and foie gras	Tinned, salted and smoked fish	Hard-boiled egg	Fruits: peeled and grated apple	Quince	White rice
Vegetables that cause flatulence	Snacks and crisps	Quince, chocolate and cocoa sweets	Lemon, grapefruit and apple juices	Tea	Red wine, liquors and spirits

The following is an example weekly meal plan in case of constipation (Meal Plan 7).





MEAL PLAN 7

· Meal plan options for people with advanced kidney cancer and constipation

	Mon.	Tue.	Wed.	Thur.
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
BREAKFAST	Coffee with milk 2 slices of wholemeal bread with oil and tomato Strawberries and orange juice	Coffee with milk 1 handful of whole grain cereal 2 plums	Coffee with milk 2 slices of wholemeal toast with blueberry jam 2 kiwis	Coffee with milk 1 handful of whole grain oats Orange
MID-MORNING SNACK	Yoghurt with nuts Herbal teas	Mini vegetable sandwich with wholemeal bread Herbal teas	Whole grain cereal bar Herbal teas	Mini ham sandwich with wholemeal bread Herbal teas
LUNCH	Brown rice with vegetables (see recipe) Pork loin with green peppers 2 mandarins	Chickpea salad with egg, tuna and walnuts (one course meal) 2 kiwis	Sautéed chard with ham Stewed chicken and vegetables Banana	Whole wheat spaghetti with vegetables John Dory fish with grilled courgettes Pear
AFTERNOON SNACK	2-3 whole wheat biscuits	Yoghurt with berries	Yoghurt with muesli	1 pot of fresh cheese
DINNER	Cream of leek and asparagus soup Sardines with salad Pineapple	Baked artichokes Grilled salmon with mushrooms Strawberries	Chicory with anchovies Green pepper omelette (see recipe) Orange	Fresh tomato with garlic and oil Hake and prawn croquettes Yoghurt

Fri.	Sat.	Sun.	
FRIDAY	SATURDAY	SUNDAY	
Coffee with milk 2 slices of wholemeal toast with oil and fresh cheese Mango	Coffee with milk 2 slices of wholemeal toast with ham 2 plums	Coffee with milk 1 handful of whole grain cereal Orange	BREAKFAST
Yoghurt with hazelnuts	1 handful of cashew nuts Herbal teas	Yoghurt with oats	MID- MORNING SNACK
Lentils with vegetables Baked swordfish with courgettes 2 kiwis	Green beans and potatoes Grilled chicken breasts Orange	Salad Chickpeas with a hard-boiled egg Apple	LUNCH
Mini salad sandwich with wholemeal bread Herbal teas	Yoghurt with muesli	2 slices of wholemeal toast with ham	AFTERNOON SNACK
Grilled vegetables Chicken burger with red peppers Banana	Vegetable soup Grilled tuna with courgettes Strawberries	Grilled wild asparagus Homemade vegetable, tuna and egg pie (see recipe) 2 mandarins	DINNER

**GENERAL
GUIDELINES FOR
THE MEAL PLAN:**

Eat 2 slices of wholemeal bread with lunch and dinner.

Remember to follow the dietary recommendations in the section "How should I change my diet in case of...? Constipation."

3. WHAT FOOD-DRUG INTERACTIONS SHOULD I TAKE INTO ACCOUNT?

It is important to know that there are interactions between food and certain drugs that can change the effects that the treatments are expected to have. For example, certain foods may decrease the therapeutic action of some medicines or increase their toxicity. That is because these interactions can affect how much medication travels through our body.

The path that a drug takes through our body (known by the acronym LADME), from when it is administered until it is eliminated, is split into the following stages:

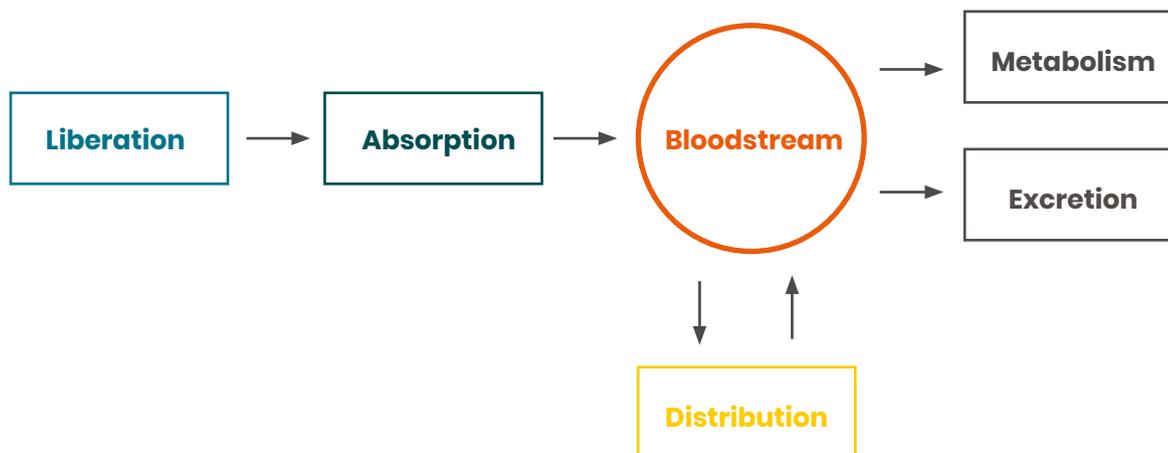
- **L**iberation: the drug dissolves, enabling it to be absorbed.
- **A**bsorption: it enters the body through cell membranes and moves into the bloodstream.
- **D**istribution: it travels through the bloodstream to each of the organs in our body, and therefore to the place where it needs to act.
- **M**etabolism: it transforms into compounds that are easy to eliminate.
- **E**xcretion: it is eliminated from the body.



Food can mainly affect the absorption and elimination processes. However, drugs that are administered directly into the bloodstream do not need to be absorbed by our digestive system, meaning that food will only affect the elimination process.

In addition to food, it is very important to bear in mind that **some food supplements or medicinal plants can also affect treatments.** Taking them during cancer treatments could make them less effective and/or

increase unwanted side effects. One example is herbal medicines containing *Hypericum perforatum*, **otherwise known as St. John's wort**, which can sometimes cause interactions with serious repercussions, such as reducing the effect or duration of treatments. Generally speaking, **it not recommended to use this type of medicine or plants** while receiving cancer treatment. It is important for you to research and talk to your healthcare team about any food supplements or medicinal plants that you are taking or want to take.



Path that drugs take through the human body (LADME)

Interactions with immunotherapy and/or chemotherapy* treatments:

Immunotherapy is not affected by the food you eat. However, in the case of chemotherapy*, some foods may influence the elimination of the drugs used. That is why it is important for you to follow the recommendations of your oncology team or pharmacy and tell them if you are taking any food supplements or medicinal plants.

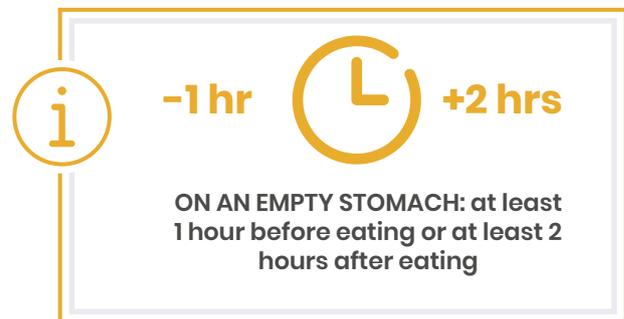
Interactions with targeted therapy:

In the case of targeted therapy, any drugs **administered orally** (for more information on this treatment, see section 3 "Treatments for kidney cancer" in chapter 1) can be affected during the processes of absorption and elimination if they are taken with food. Consequently, you should bear in mind that:

- **Some medicines should be taken on an empty stomach**, i.e. at least one hour before eating or at least two hours after eating, because some foods can increase or decrease the absorption of certain medicines.
- **Taking certain drugs at the same time as eating** foods such as **grapefruit**, may affect **their elimination** and result in higher levels of the drug than prescribed in the body, and therefore more side effects.

- **Some medicines** in this group can be taken without food restrictions, on a full or empty stomach, although we **recommend taking them in the same way every day**.

Due to all these potential interactions, it is **very important that you follow your healthcare team's instructions about taking your medication**. We also recommend that **you take each medicine as part of a routine that you have already established** and always store them in the same place with the instructions on how, when and how much you should take. You can also set an alarm on your mobile.





RECIPES



CONSOMMÉ



8 people



INGREDIENTS

- 2 leeks
- 2 large carrots
- 1 onion
- 1 chicken thigh
- 250 g veal *morrillo* (neck cut)
- 1 veal knuckle
- 4 l water
- Salt
- Fresh parsley
- Bay leaf



METHOD

1. Remove the skin and any remaining fat from the chicken thigh.
2. Heat 4 tablespoons of oil in a large pan. Once hot, cook the chicken thigh and veal *morriilo* until brown.
3. While the meat is browning, peel the onion and slice it in half.
4. Wash the carrots and leeks and cut them into 3 pieces.
5. When the meat has browned, add the rest of the ingredients: the leeks, carrots, bay leaf, parsley (whole) and veal knuckle. Pour in the water and add salt.
6. Cover the pan and cook over a medium heat for 2 hours. If you are using a pressure cooker, half an hour will be enough.
7. Regularly scoop out the foam created with a spoon.
8. After cooking, remove the meat, bone, and vegetables.
9. Strain the consommé and leave it to cool so you can remove the layer of fat that will solidify on the surface.



TIPS

- You can adapt this recipe to make soup instead of consommé by adding some of the meat and vegetables you cooked and noodles.
- If you are undernourished or at risk of becoming so, we recommend serving the dish with egg, potato, cornflour or cheese. You can find all our recommendations in the “My diet after surgery” section of chapter 3.
- Remember to let this dish cool down before eating it if you have mouth discomfort, ulcers, mucositis, dysphagia*, xerostomia, nausea and vomiting.

COLD WATERMELON SOUP



4 people



INGREDIENTS

- 1 kg watermelon
- ½ cucumber
- 200 g low-fat quark
- 1 lemon
- 1 slice of fresh ginger



METHOD

1. Cut open the watermelon and carefully remove the skin and seeds.
2. Chop the cucumber.
3. Put the watermelon and cucumber in a blender. Add the lemon juice to give it a fresh, citrusy touch. Blend until you get a very thin soup. To make it smoother, you can pour it through a sieve to remove any bits.
4. Stir the quark into the soup to give it a thicker consistency and season with salt and pepper. Mix well.
5. Keep it in the fridge so it stays cold. Serve in individual bowls with a little grated fresh ginger on top for a spicy touch. Add some mint leaves and a few drops of lemon juice to finish.



TIPS

- You can adapt this recipe to your liking by substituting ingredients with those you prefer. We encourage you to try it with melon if, given your circumstances, you are able to eat it.
- If you have mucositis, do not include the cucumber as it may increase irritation.
- If you are undernourished or at risk of becoming so, replace the low-fat quark with a full-fat dairy product.
- This recipe is not suitable if you have dysgeusia* because you should avoid sweet foods such as watermelon. It is also not recommended if you have diarrhoea.

CLAMS WITH STARFLOWERS AND RICE



4 people



INGREDIENTS

- 1 kg washed starflowers (borage)
- 200 g clams
- 10 g flour
- 2 cloves of garlic
- 1 handful of rice (30 or 40 g)
- Fresh chopped parsley
- Salt
- White wine
- Extra virgin olive oil



METHOD

1. Cook the starflowers in plenty of water for 15 minutes. Once cooked, drain the stock and keep to one side.
2. Peel and chop the garlic cloves before lightly frying them in the olive oil over a medium heat.
3. When they start to brown, add the flour and stir well. Pour in a splash of white wine while stirring.
4. Sauté and add the clams (already steamed) with two or three cups of the stock from cooking the starflowers. Once it starts to boil, add the rice.
5. Cook for about twenty minutes and then add the salt and starflowers. Sprinkle the chopped parsley on top and cook for a couple more minutes.



TIPS

- If you have constipation, we recommend switching from white rice to brown.
- This recipe is not suitable if you have mouth discomfort, mucositis, dysphagia* or diarrhoea.
- If you have to monitor your potassium levels, use tinned starflower. Drain the liquid and wash well under the tap first.

VEGETABLE, TUNA AND EGG PIE



8 people



INGREDIENTS

- 4 sheets of puff pastry
- 6 small tins of tuna
- 2 onions
- 4 cloves of garlic
- 1 or 2 carrots
- 1 courgette
- 6 tomatoes
- 1 green pepper
- 1 red pepper
- 12 mushrooms
- 5 eggs
- Salt
- Ground pepper
- Extra virgin olive oil
- *Tomate frito* sauce





METHOD

1. Pour some olive oil in a frying pan or saucepan and peel and chop the vegetables as small as possible, adding them to the pan as you go. You can do this in the order they are listed in the ingredients section.
2. Once all the vegetables have been added, stir well, lower the heat and season with salt and pepper.
3. When the vegetables are tender, open and drain the tuna tins before adding to the pan. Mix well.
4. Boil the eggs and then peel, chop and add them to the vegetable and tuna mixture.
5. Finish by adding a small amount of *tomate frito*, just enough to thicken the mixture.
6. Place two sheets of puff pastry on a baking tray, spread the mixture on each and cover them with the other two sheets.
7. Seal the edges well with a fork and brush with egg wash.
8. Bake the pies at 180 °C for around 30 to 40 minutes, depending on the power of your oven.



TIPS

- You can adapt this recipe to your liking by substituting ingredients with those you prefer.
- This recipe is not suitable if you have mouth discomfort, ulcers, mucositis, xerostomia or nausea and vomiting.

LEEK, COURGETTE, POTATO AND ALMOND PURÉE



4 people



INGREDIENTS

- 100 g washed leek
- 100 g courgette
- 150 g potatoes
- 50-60 g whole almonds
- 1 and ½ litres of chicken stock
- Extra virgin olive oil
- Ground white pepper
- Ground nutmeg
- Fresh parsley



METHOD

1. Put the potatoes in a saucepan with cold water, slowly bring to the boil and cook for 15 minutes. Drain and set aside.
2. Crush the almonds and put to one side.
3. Pour oil into a large pan and add the leeks. Cover with a lid and cook until tender.
4. Add the courgette and cover the pot again.
5. Add the chopped almonds and cover the pan again.
6. Add the potatoes and pour over the hot stock. Cook over a medium heat until the potatoes are tender.
7. Season with a little pepper and ground nutmeg.
8. Pour into a blender and blend well to create a smooth thick creamy purée, without any lumps.
9. Sprinkle a little chopped parsley on top.



TIPS

- › You can adapt this purée to your liking by using other vegetables such as carrots, squash, mushrooms, etc. You will also notice that we offer several options in the meal plans depending on your specific situation.
- › If you are at risk of undernutrition, you could add: cornflour, fried bread, rice, grated cheese or cheese triangles.
- › If you are undernourished and have lost muscle mass, you could add: chopped or pasteurised egg.
- › If you have chronic kidney disease, remember that you should not eat nuts. Therefore, remove the almonds from the recipe.
- › If you have side effects such as mucositis, nausea, diarrhoea or constipation, we recommend that you adapt this purée according to the instructions in the “How should I change my diet in case of...?” section of chapter 4.

PEPPER OMELETTE



2 people



INGREDIENTS

- 3 eggs
- 100 g red pepper
- 100 g green pepper
- Basil and ground white pepper
- Extra virgin olive oil



METHOD

1. Julienne the peppers (cut them into very thin long strips).
2. Put the peppers in a saucepan with cold water, slowly bring to the boil and cook for 10 minutes. Drain and set aside.
3. Sauté the vegetables in a frying pan with oil and add the basil and white pepper.
4. Beat the eggs and pour into the pan with the sautéed vegetables.
5. Mix well and cook the omelette until golden brown on both sides.



TIPS

- You can adapt the ingredients you put in the omelette to your liking. Choose, for example, onion, potatoes, ham, tuna, etc. You will also notice that we offer several options in the meal plans depending on your specific situation.
- If you are undernourished, add 1 or 2 more eggs to the recipe.
- If you have diarrhoea, remember that you can only eat omelettes when you return to a normal diet in stage 4 and that you should only make them with egg whites.

RICE WITH VEGETABLES



4 people



INGREDIENTS

- 300 g rice
- 600 ml water or vegetable stock
- 1 green pepper
- 1 red pepper
- 1 onion
- 1 red onion
- 4 large tomatoes
- 50 g peas
- 2 cloves of garlic
- Extra virgin olive oil
- ½ glass of white wine
- Ground black pepper to taste



METHOD

1. Peel and chop the garlic, onions and peppers. Put to one side.
2. Blanch the tomatoes, remove the skins and grate. Put to one side.
3. Heat oil in a pan and add the onion and peppers. Lightly fry for 5 minutes over a medium heat, stirring constantly. Add a pinch of salt.
4. Add the garlic and continue stirring. Cook over a medium heat for another 10 minutes.
5. Add the wine and tomato to the pan. Allow the liquid and the alcohol from the wine to evaporate until it starts to stick to the pan.
6. Then, add the peas and a pinch of salt.
7. Add the rice and mix everything together. Cook for 1 more minute over a medium heat, stirring the ingredients well.
8. Add the water or vegetable stock and stir well so that the ingredients soak up the liquid. Turn the heat up to maximum until it starts to boil, then reduce the heat to medium and simmer for about 15 minutes.
9. If the pan runs out of liquid. Gradually add more water or stock until it is just right.
10. Remove from the heat and leave to stand for about 10 minutes.



TIPS

- ▶ You can adapt this recipe to your liking by including your favourite vegetables.
- ▶ If you have constipation, we recommend using brown rice. In this case, increase the cooking time.
- ▶ If you have to monitor your potassium levels, do not include the tomatoes in the recipe.
- ▶ If you are undernourished, add something that will increase your protein intake such as eggs, chicken, turkey, squid, cuttlefish, etc.
- ▶ This recipe is not suitable if you have mouth discomfort, mucositis, dysphagia*, xerostomia, nausea, vomiting or diarrhoea.

COUSCOUS WITH VEGETABLES AND A HARD-BOILED EGG



1 person



INGREDIENTS

- 40 g couscous
- 1 egg
- ½ onion
- ½ courgette
- ½ carrot
- 2 tablespoons of extra virgin olive oil
- Oregano
- Bay leaf



METHOD

1. Cook the couscous in a saucepan of boiling water with a pinch of salt. There should be double the amount of water to couscous. When the water comes to the boil, add the couscous to the pan and simmer until the water has been absorbed. Do not stir while it is cooking to avoid it sticking together.
2. While the couscous is cooking, *brunoise* (finely dice) the onion and lightly fry in a pan with oil and then *brunoise* and add the courgette and carrot.
3. Once cooked, mix the couscous with the vegetables, add the spices and wait for the water to reduce.
4. Serve with a chopped hard-boiled egg.



TIPS

- Couscous is produced from wheat semolina, which is rich in protein and provides a lot of energy. If you cannot eat wheat, we recommend substituting it with quinoa.
- You can adapt this recipe to your liking and nutritional status by incorporating other types of vegetables and ingredients.
- If you are undernourished you can add another high-protein ingredient such as chicken or turkey.
- Due to its texture, this dish is not suitable if you have xerostomia, dysphagia* or mucositis.

COD IN SALSA VERDE



4 people



INGREDIENTS

- 500 g boneless cod
- 600 ml fish stock
- 200 ml white wine
- 2 tablespoons flour
- 1 large onion
- 1 clove of garlic
- 250 g prawns (peeled and washed)
- 120 g peas
- Salt
- Extra virgin olive oil
- Fresh parsley



METHOD

1. Start by preparing the salsa verde. Brunoise (finely dice) the onion and slice the garlic.
2. Pour a splash of olive oil into a fairly large frying pan and lightly fry the onion and garlic. Cook for about 10 to 12 minutes over a medium heat. Add a pinch of salt to help draw the water out of the onion.
3. Add the two tablespoons of flour and fry for about 5 minutes. The flour will thicken the salsa verde slightly and needs to be cooked so that it does not taste raw.
4. Turn the heat up a little and add the white wine. Allow the alcohol to evaporate and then add the fish stock.
5. Now, turn up the heat and when it comes to the boil, add the cod after rolling in flour.
6. Lower the heat and cook for another five minutes to help bring out the flavours. Stir from time to time to thicken.
7. Add the peas and when they are cooked, add the prawns. Sprinkle a little chopped parsley on top. Prawns do not take long to cook, which is why they are added at the last minute. If you want the salsa verde to have a thinner texture, blend the ingredients in a blender.



TIPS

- You can use the salsa verde with other white fish such as hake, John Dory, sole, angler fish, etc.
- This recipe is not recommended if you have ulcers or mouth discomfort, mucositis, dysphagia*, nausea and vomiting, high blood pressure (HBP) or diarrhoea.

A close-up photograph of a piece of grilled hake fish. The fish is white and flaky, with a golden-brown, slightly charred crust. It is garnished with fresh green parsley and a bright yellow lemon slice. The background is a plain white surface.

GRILLED HAKE



1 person



INGREDIENTS

- 1 slice of hake - 1.5 cm to 2 cm thick
- 1 tablespoon (15 ml) of extra virgin olive oil
- Fresh parsley
- Ground white pepper
- Salt to taste



METHOD

1. Add a little salt to the hake on both sides.
2. Heat a tablespoon of olive oil in a frying pan.
3. Once hot, place the hake in the pan and do not move it. Wait until the side in contact with the pan is brown. One trick to know if it is time to turn the hake over is to wait until the top of the fish no longer looks raw and is starting to turn white. You can also lift the hake a little to check if it has browned underneath.
4. Turn it over and cook the other side until it is golden brown.
5. Serve with a sprinkling of chopped parsley and pepper.



TIPS

- › You can adapt this recipe to your nutritional status and use other types of fish and meat. You will also notice that we offer several options in the meal plans depending on your specific situation.
- › Remember, if you have ulcers or mouth discomfort, nausea, vomiting, etc. you should not season this recipe with spices.
- › If you have diarrhoea, this recipe can only be introduced in stage 4 when you return to a normal diet.

SALMON EN PAPILOTE



4 people



INGREDIENTS

- 4 fresh salmon fillets (700 g to 800 g)
- 100 g washed leek
- 175 g carrot
- 175 g green beans
- 2 medium potatoes
- 8 tablespoons of white wine
- Dill
- Salt
- Pepper
- Extra virgin olive oil



METHOD

1. Remove the skin from the salmon and make sure there are no bones.
2. Thoroughly wash all the vegetables. Peel the carrots and potatoes.
3. Julienne the leek, green beans and carrots (cut them into very long thin strips). It is important to cut them very thinly as they will only be cooked for a short time in the oven.
4. Cut the potatoes into thin slices (we recommend using a mandoline slicer). The potatoes will need to be cooked beforehand. To do this, put them on a plate after they have been cut, and cover with another plate. Cook them for 5 minutes in the microwave.
5. Once all the ingredients are ready, create the little parcels. You will need 4 sheets of baking paper large enough to fully seal each parcel.
6. Spoon the vegetables onto each sheet of baking paper and place the salmon fillets on top.
7. Pour a couple of tablespoons of white wine and a drizzle of olive oil over each piece of salmon. Season with salt and pepper and sprinkle with a pinch of dill.
8. Close each parcel, taking care to press the edges of the paper tightly together.
9. Bake the salmon en papillote for approximately 15 minutes at 190 °C. The baking time will vary according to how thick the salmon fillets are.
10. Remove the papillotes from the oven and serve them on the paper. They can be transferred to a plate if you prefer.



TIPS

- › You can cook food en papillote using virtually any source of heat: oven, steamer, microwave or griddle.
- › You can also use this technique to cook vegetables and leafy greens (carrots, leeks, potatoes, mushrooms, etc.), other fish (cod, grouper, hake, sea bream, etc.) and even shellfish (mussels), adapting the times to each ingredient.
- › If you have diarrhoea, you should avoid eating oily fish because of its higher fat content, so we recommended switching to white fish instead.
- › If you have dysphagia*, avoid eating leeks. We encourage you to replace them with another non-fibrous vegetable such as courgette.

VEAL MEATBALLS IN AN ALMOND SAUCE



4 people



INGREDIENTS FOR THE MEATBALLS

- 400 g veal (minced)
- 1 clove of garlic
- 1 large egg
- 25 g breadcrumbs
- Ground white pepper



INGREDIENTS FOR THE SAUCE

- 125 g raw and peeled almonds
- 40 ml extra virgin olive oil
- 1 slice of bread
- 1 glass of water (or beef stock) for dipping the toasted bread
- 1 glass of water (or beef stock) for boiling the almonds
- 1 clove of garlic
- Salt to taste
- Ground white pepper to taste
- A little vinegar



PREPARING THE MEATBALLS

1. To make the meatballs, add the crushed garlic, egg, pepper and bread to the minced meat.
2. Knead well and leave to macerate for at least 1 hour.
3. Divide the mixture into equal portions of about 40 g each and use a little flour to help shape them into balls. Once they are ready, roll them in flour.
4. Fry the meatballs in a frying pan with olive oil. They should be golden brown on the outside and raw on the inside. Put to one side.



METHOD

1. Put the water or stock and the almonds in a saucepan. When the water starts to boil, remove the almonds and drain. Wait for them to cool slightly and peel them.
2. Toast both sides of the slice of bread in a frying pan with oil. In the meantime, chop the garlic and set aside. Drain the oil from the toast, put it on a plate and cover with the glass of water or stock. In the same pan, brown the garlic and set aside.
3. Then add the almonds to the pan. Remove them when they are toasted.
4. Pour the almonds, toasted bread with the water or stock, garlic, salt, ground pepper and a dash of vinegar into the blender. Blend into a sauce.
5. Pour the sauce into a saucepan and add water. When it starts to boil, add the meatballs and cook together for about 15-20 minutes on a very low heat, stirring occasionally. If necessary, add more water to finish cooking as the sauce tends to thicken quickly because of the almonds.



TIPS

- › You can adapt this recipe to make fish meatballs instead. If you do, you should use fish stock to make the almond sauce.
- › If you are undernourished, you can add chopped egg or textured vegetable protein to the recipe.
- › This recipe is not suitable if you have chronic kidney disease. Remember that you should only eat nuts in moderation. It is also not suitable if you have mouth discomfort, mucositis, dysphagia*, xerostomia, nausea and vomiting, diarrhoea or constipation.
- › If you have dysgeusia*, we recommend that you make the fish meatballs and avoid eating red meat.

TURKEY AND VEGETABLE PUDDING



2 people



INGREDIENTS

- 100 g turkey breast
- 125 ml skimmed milk
- 25 g onion
- 2 eggs
- Pepper
- Nutmeg
- Extra virgin olive oil
- Salt

OPTION 1 (red option)

- 50 g red pepper
- 50 g tomato
- 25 g carrot

OPTION 2 (green option)

- 50 g green pepper
- 50 g spinach
- 1 courgette



METHOD

1. Cut the turkey breast into strips. Sprinkle with salt and brown it in a frying pan with a drizzle of oil. Put to one side.
2. Wash and chop the vegetables and onion.
3. Add some more oil to the same frying pan and lightly fry the onion for a few minutes.
4. Add the rest of the vegetables, season with salt and pepper and cook until tender. Put to one side.
5. Mix the egg, milk, fried vegetables and turkey in a large bowl. Add a pinch of salt, pepper and nutmeg.
6. Blend until creamy.
7. Pour the mixture into individual ovenproof moulds and cook in a bain-marie (place the moulds with the ingredients that need to be cooked in a pan and suspend that pan in a larger pan of water).
8. Bake in the oven at 140 °C for 40-45 minutes until the pudding has set.
9. Leave to cool, turn out and serve cold or warm.



TIPS

- You can adapt this recipe to your liking by including your favourite vegetables such as leek or aubergine.
- This recipe is not suitable if you have diarrhoea, nausea or vomiting.

BANANA MILKSHAKE



1 person



INGREDIENTS

- 1 banana
- 125 ml milk
- Cinnamon to taste
- Honey to taste



METHOD

1. Peel and slice the banana.
2. Put the sliced banana, milk, cinnamon and honey in a blender.
3. Blend into a smooth milkshake.



TIPS

- You can adapt this recipe to your liking and nutritional status.
- The basic ingredients to include are:
 - Dairy product (milk, yoghurt)
 - Seasonal fruit
 - Other ingredient such as: biscuits, ground nuts, jam, etc.
- If you have mucositis or mouth discomfort, we recommend drinking milkshakes straight from the fridge and avoiding acidic fruits.
- If you feel nauseous, avoid full-fat dairy products as they have a higher fat content.
- If you have chronic kidney disease, remember that you should use semi-skimmed milk.
- This recipe is not suitable if you have diarrhoea or constipation.
- We recommend preparing different types of milkshakes to avoid getting bored. For example:
 - Milkshake made from semi-skimmed milk + “María” style plain biscuits + ground almonds
 - Yoghurt and peach jam smoothie
- Remember not to drink smoothies if you have to monitor your potassium levels.

CARROT AND NUT SPONGE CAKE



12 portions



INGREDIENTS

- 4 eggs
- 250 g carrot
- 200 g wholemeal flour
- Half a sachet of baking powder
- 125 ml sunflower oil
- 200 g sugar
- One teaspoon of cinnamon
- Chopped nuts



METHOD

1. Preheat the oven to 190 °C.
2. Grate the carrot with a mandoline and set aside.
3. Beat the eggs and sugar in a bowl until frothy.
4. Add the oil and mix well.
5. Add the grated carrot and cinnamon and beat to combine.
6. Sieve the flour and baking powder into the mixture.
7. Finally, add the chopped nuts and carefully mix again.
8. Bake in the oven for 30 minutes. If using a deep baking tin, add another 15 minutes to the cooking time.



TIPS

- › You can adapt this recipe to your liking.
- › If you have mucositis, chop or grind the nuts very finely as they are a crunchy food that could be painful if they come into contact with the sores.
- › This recipe is not suitable if you have diarrhoea.
- › If you have to monitor your potassium levels, remember not to include the nuts in the recipe.

05

HOW CAN I IMPROVE MY QUALITY OF LIFE?

After being diagnosed with kidney cancer, most people want to know what changes they can make to their lifestyle and how to maintain them while they have the disease. You may also wonder **how to go back to your normal life**, eat well, alleviate other side effects that you are experiencing or incorporate exercise into your everyday life.

In addition to this, the uncertainty and shock following diagnosis and the new worries that you have while you are ill are accompanied by emotions and feelings such as fear, anger or sadness, which you may already be feeling. **You might wonder: how can I feel better?**

All of these questions have an impact on our quality of life and deserve to be given time, recognition and an appropriate response.

In previous chapters we have discussed cancer and food in detail. In this one, we offer guidelines and **advice for managing other side effects** unrelated to food, **increasing your level of exercise and taking care of yourself on a mental and emotional level**. Shall we begin?

1. RECOMMENDATIONS FOR MANAGING OTHER NON-NUTRITIONAL SIDE EFFECTS

Cancer treatments can cause other side effects that we explain in more detail below. Bear in mind that not all of them happen and that, in general, they disappear after finishing treatment. If you are unsure how to deal with and treat them, or experience side effects other than those we describe, **speaking to your healthcare team who will offer you advice on how to control and manage them.**



TIREDNESS AND MUSCLE OR JOINT ACHEs

Sometimes the medication, or even the disease itself, cause **tiredness and pain or discomfort in our muscles or joints.** This can have a negative effect on our quality of life. In these cases, we recommend:

- › Planning the activities you need to do throughout the day and leaving time to rest in between them. Avoid any activities that may require a lot of physical effort.
- › Getting enough rest, but not too much.
- › Exercising regularly according to your physical condition.



SKIN REACTIONS, DRY SKIN AND MUCOUS MEMBRANES

Cancer treatments generally increase our **skin's sensitivity to sunlight.** Sometimes they also cause other skin problems such as **spots, rashes, dry or itchy skin** (an annoying sensation that makes you want to scratch your skin), faded skin and hair. In these cases, we recommend:

- › Showering with lukewarm water and using fragrance-free or oatmeal soap or shower gel.
- › Moisturising skin twice a day with alcohol-free creams.
- › Wearing clothes made out of cotton as much as possible. Wash them with mild detergents.
- › Using artificial drops or saline solution to prevent dry eyes.
- › Protecting your head and skin from direct sunlight and using factor 50 or higher sun cream.



HAND-FOOT SYNDROME

This is an **inflammatory reaction affecting the palms of the hands or soles of the feet** that can cause itching, redness, swelling and peeling. In this case, you should:

- Wash your body very carefully with fragrance-free soap and dry your skin thoroughly afterwards.
- Apply emollients or urea moisturisers because they moisturise skin better than normal creams.
- Use a cold pack to try to relieve the pain.
- Wear cotton socks.
- Consider using silicone insoles.



CHANGES TO HAIR

Depending on the medication you have been prescribed, your hair may fall out (**chemotherapy***) or become thinner and whiter (targeted therapy and immunotherapy).

In case of **hair loss**, wash your scalp with a mild soap. Put on sun cream or wear scarves, caps or hats when you are exposed to the sun or cold. Your hair will grow

back after treatment, although it will be weak and vulnerable to styling tools at the beginning, so try to use hairdryers or straighteners as little as possible. We recommend that you do not bleach your hair and if you want to dye it, use natural dyes.

When you temporarily lose your hair, it is completely up to you whether you wear a wig. If you would like to, you can talk to your health or social care team about what is available and which option is the best for you.

If your **hair becomes weaker or bleached**, use non-aggressive hair care products, brush it with a soft bristle brush and only wash it when necessary. As in the previous case, you can dye it if you want to, but only use natural dyes. Avoid styling tools that reach high temperatures as much as possible.

2. EXERCISE: WHAT ARE THE BENEFITS AND WHAT SHOULD I DO?

Not enough is known about this disease at the moment to be able to confidently recommend exercises that could provide specific benefits. What we do know, however, is that a **healthy lifestyle is very beneficial**: quitting smoking, not drinking alcohol, eating properly, maintaining a healthy weight and being physically active will always help.

With regard to physical activity, we recommend that you exercise regularly.

There is some evidence that exercising improves patients' cardiovascular health (heart and blood circulation). Together with proper nutrition exercise can help maintain a healthy weight, strengthen muscles, reduce fatigue, anxiety and sadness, and increase personal satisfaction.

We also know that regular exercise plays an important role in reducing the risk of some types of cancer.

For example, after surgery, the recovery process is estimated to take six to eight weeks. The duration of this process will depend on the patient's general health, the type of surgery performed (partial or radical) and the technique used (laparoscopy or open surgery), as we explained earlier (for more information, see section 3: "Treatments for kidney cancer", in chapter 1 of this guide).

It is normal to lose your physical fitness, endurance and muscle strength while you have cancer, especially because of the treatments. Don't be discouraged because once you have fully recovered you can resume your normal routine and activities. We do recommend, however, that you talk to your healthcare team before starting an exercise plan because it is important to adjust it to suit your particular situation as some of the side effects of surgery, and also of the treatments, may last for a long time or not appear until further down the line.

WHAT ARE THE RECOMMENDATIONS FOR STARTING TO EXERCISE AGAIN AFTER SURGERY?

- Allow yourself to rest for one to two weeks after surgery.
- Make sure to keep the surgical wound dry at all times, avoiding activities such as swimming, saunas or hydrotherapy, as well as strenuous exercises that make you sweat a lot, so as not to interfere with the healing process.
- Avoid driving for up to two weeks. Also bear in mind that you may need help with everyday activities during this time.
- After two weeks, if there are no medical contraindications, start incorporating some exercise into your daily routine and slowly increase the frequency, amount of time and intensity of the exercise. Your healthcare team will advise you on the ideal intensity according to your physical condition.
- When doing household tasks, try not to force yourself into certain positions, especially those that risk bruising your lower back. Go for short walks or up and down stairs.
- Do not lift heavy objects (more than 2-4 kg) during your usual activities and do not exercise with weights, medicine balls (spherical leather, rubber or plastic balls that vary in diameter and are heavier than 1 kg) or elastic bands (on any part of your body) for the first six weeks after surgery.
- Introduce and factor in/assimilate hydration as an element of planning exercise. If in the short to medium term you want to start or resume a sport that is particularly demanding (running, cycling, triathlon, etc.), establish hydration routines before, during and after doing the activity. Talk to your healthcare team about the possibility of taking over-the-counter supplements.
- Don't push yourself too hard and, above all, rest when you need to.

If you have any questions about starting to exercise again, do not hesitate to talk to your healthcare team. Take advantage of follow-up appointments to find out the answers to these questions or report any new symptoms.

3. MY EMOTIONS WHILE I HAVE CANCER

Cancer affects our physical health but also our emotional health and social life. You may experience emotions that you are not used to and do not know how to cope with or manage, or face personal and family situations that you had never thought about before your disease.

Although there are as many emotional reactions as there are people, meaning that everyone faces this disease in a different way, there are also some common emotions that we are going to address in this section.

Bear in mind that emotions are neither good nor bad, although some are more unpleasant than others. Every emotion that we experience, from joy, excitement, gratitude and pride to anger, sadness, frustration, anxiety or fear, we experience for a reason and we need them to be able to cope with different situations in life, since they indicate what we need to incorporate or remove. That is why it is so important to identify and see them as normal and to never judge or ignore them. The aim is to accept them, feel them and learn to manage them.



COMMON EMOTIONS



DENIAL - *"This is not happening"*

In a disease like cancer, denial is common. Thoughts such as "this is not happening to me" or "it's a mistake" are shared by many and are completely normal.

Denial is not an emotion per se but a **defence mechanism** that most people use to cope with painful, unpleasant or stressful situations and that initially gives us time to adapt to the new situation. However, **staying in denial will affect your emotional state** and prevent you from taking appropriate actions to improve your health, such as seeking advice or listening to the information you are given by your healthcare team.

Take time to digest the news about your disease and understand what the implications will be and try to **find out information that will help you to stop being in denial**. If you think it is appropriate, ask for another medical opinion but always use reliable sources of information and registered professionals.



ANGER - *"It's not fair that this is happening to me!"*

Anger is directly linked to the feeling that life, or God if you are religious, has not been fair to you. This includes the famous question: **"Why me?"** When we realise that there is no answer to that question and that we are not to blame for what has happened to us, **when we are aware of the reality of the situation and no longer deny it, that is when we start the acceptance process.**

Feeling like there is nothing you can do to reverse the situation or, in some cases, experiencing a late diagnosis or the disease advances can make you angry or infuriated. You may also experience these emotions when you have to change your routines which may lead to feelings of frustration and helplessness. Knowing that this may happen will allow you to **create strategies for dealing with it**, should it happen.

Focusing on your anger will only make you feel more nervous and stressed. One of the keys to channelling anger, and not taking it out on the people around you (family and healthcare team) is to **talk about it and effectively plan** the steps that you can take to face the disease and improve your quality of life.



FEAR - *"It scares me that I might suffer"*

Fear warns us of an event that needs to be controlled or at least managed in a healthy manner. The word cancer also has negative connotations that often trigger **thoughts about our own existence**, the vulnerability of both our and our loved ones' future, the after-effects of treatment and the recurrence or progression of the disease. It can even lead us to think about death, which makes us even more emotional and thus more uncertain and like we have lost control.

It is therefore essential to **learn to accept the uncertainty of life** and to face fear and control it with the tools that we already have or can acquire. We know that it is very hard and difficult to talk about these issues but **sharing how you feel and what worries you with your loved ones**, who may be feeling the same way as you, and with your healthcare team, can be very helpful.



SADNESS - *"Nothing makes me happy anymore"*

Sadness is an emotion that genuinely occurs after a loss, in this case, a **loss of health**. Facing this emotion head on is essential for us to manage it in the best way possible. Culturally, and particularly among men, sadness has not been normalised, not even allowing

yourself to show it, and this has sometimes led to depression.

It is **important to differentiate sadness (emotion) from depression (condition)**. Depression is an illness that causes a feeling of intense and lasting sadness and is associated with symptoms such as loss of appetite, weight loss, lack of motivation to do activities, fatigue, loss of interest and sleep disorders, among others. Depression and sadness should not be understood as similar concepts, although sometimes prolonged sadness can lead to depression.

We may also feel sad if we are unable to find our meaning in life, which may not be the same as it was before having cancer, or because our life plans have had to be changed. It is completely normal to feel this way: we have spent a great deal of energy paying attention and concentrating throughout the process and **we need time to adapt**.

Sometimes, sadness can make you feel emotions such as apathy and reluctance, which can stop you from enjoying the same things as before and cause you to lose interest in daily activities and friendships. You may even find it difficult to get out of bed.

We encourage you to look around you and focus on the things that make you feel good. Set realistic goals because achieving them will make you feel satisfied and motivated. Look for distractions and do not neglect your job, leisure activities and family or social life.



GUILT - *"I feel guilty for hurting my loved ones"*

Guilt is not a very common emotion but you may feel it if you think that you have not taken care of yourself or should have gone to the doctor sooner, or that you have upset or worried your loved ones, something that makes you feel very uncomfortable.

We encourage you **not to judge yourself** and not to dwell on this emotion. Try to let it go so as not to start "beating yourself up." **Only use guilt to help you recognise mistakes and think of ways to fix them or not repeat them.**

All of these emotions are normal and will not affect how the disease progresses. If you are still feeling them after a reasonable period of time or they prevent you from coping with your day-to-day life, do not hesitate to consult a psychologist if you need help to deal with them.



HOW CAN I MANAGE MY EMOTIONS BETTER? RECOMMENDATIONS FOR COPING MECHANISMS

As you can see, there are a number of emotions and thoughts that are very common in people with cancer. Allowing yourself to feel them is positive, as there is no point in locking them away and ignoring them as though they do not exist. If you do so, they will emerge sooner or later but will have become more intense and difficult to control. For that reason, **we encourage you to understand your feelings and find a way to live with these worries and emotions** so that they affect your life as little as possible. These **three recommendations** will help you to do so:



Talk to your loved ones. These are unique and complicated times for the entire family and talking to each other will help you to better understand what you are feeling and what you need.

We tend not to talk about our problems so as not to worry those closest to us. Although it is normal to want to protect others, we encourage you to step forward and begin an open dialogue. By doing so, you will be able to **explain how you want them to help you** and, at the same time, find out how they are feeling and **what you can do to support them**. In short, you will be able to **face this stage as a team**.

Difficult conversations (e.g. telling your family members about your diagnosis or discussing

certain fears or concerns) require some planning. **Choose a good time and place to tell them and allow enough time for conversation.** If you or your immediate family have children, we encourage you to involve them in the process, provide them with age-appropriate information and always give them an opportunity to ask questions. If you are unsure what to say and how to say it, we suggest you ask for professional advice.



Managing information. Knowing more about your disease can help you to make decisions about treatments and how to manage side effects, among other things. **Information helps us to take more control of our lives**, which is especially important at this time when you may feel very uncertain and vulnerable. Some of our fears stem from the unknown, from the insecurity of not knowing what the next step will be or how cancer will affect us in the long term. Having access to detailed information about your situation allows you to know what position you are in and what you can do about it.

However, **there is another side to information:** it can make you feel even more scared, sad or worried. This can happen if you come across certain information that you would rather not know or are unable to process at that time. Also, if the information is false or outdated or does not apply to your situation. That is why we suggest that you **think first about what you do (and do not) want to know** and the reasons why you want to know it. Once you have asked yourself this question,

we encourage you to always discuss your worries with your healthcare team and, if you want, use their answers to find out more information from reliable sources, such as this guide. This type of resource will help you to live alongside kidney cancer better, although it should never replace the recommendations of your healthcare team.



Talk to psychologists and social workers. As we said earlier, all of the emotions described are part of the process of adapting to the news and changes that are about to take place in your life. Therefore, it is very important to normalise them and allow yourself to feel them. In general, you will not need to use these services unless you are looking for specific advice to help you through this process.



When is it best to speak to a psychologist or social worker?

1. Psychology. We recommend seeing a psychologist if you notice that the emotions you are feeling are very intense, continuous and are having a significant impact on your everyday life. Consider this option if you have recurrent thoughts that you cannot control, problems falling asleep, frequent outbursts of anger, if you feel sad all the time and, in short, any other circumstance in which your mood is affecting your quality of life.

2. Social work. Cancer can burst onto the scene and change our professional, financial, family, social and other areas of our lives. Social workers will help you through this process to prevent and respond to any impact that kidney cancer may have on the different areas of your life. They offer specialist advice on the best resources and strategies to use to face this stage with the help of everything you have within your reach.



We would like to end this guide by sharing the following reflection. Although experiencing a disease of this kind can alter the structure of many aspects of your life, both personally and with your family and closest friends, we do not want to miss this opportunity to send you a positive message: it can also be an opportunity for you to rethink how you understand life and how you want to live it, as an individual and at a social level. It is a turning point that can help you to grow, be better prepared to face the future and enjoy life more.



GLOSSARY OF TERMS

In this section you can find the definition of all the words followed by an asterisk (*) in the guide.



- **Ageusia:** a condition that causes the patient to completely lose their sense of taste, meaning they cannot identify any flavour.
- **Anorexia:** an eating disorder that causes loss or lack of appetite and, as a result, weight loss. It may be caused by certain diseases or treatments. If it is caused by behavioural or emotional disorders, it is called anorexia nervosa.
- **Basal diet:** general diet or basic meal plan that people follow when they are ill but do not require any special food. It is based on a healthy and balanced diet.
- **Bolus:** mass formed after chewing and mixing food with saliva.
- **Carcinoma:** generic name for all tumours that grow on the skin or superficial cells of internal organs (lung, breast, kidney, colon, etc.).
- **Calcitriol** - an active form of vitamin D found in the body. Calcitriol is formed in the kidneys or produced in a laboratory and is used as a medicine to increase calcium levels in the body in order to treat calcium deficiencies in the skeleton and tissues caused by kidney or thyroid disorders.
- **Central venous catheter:** A device used to take blood and also to administer treatments and nutrients. It refers to a catheter (thin and flexible tube) that is inserted into a vein in the chest, usually



under the collarbone, and pushed through into the superior vena cava (large vein on the upper right side of the heart).

- **Chemotherapy:** a drug treatment that aims to kill cancer cells, usually by stopping their ability to grow and divide.
- **Cystic kidney disease:** an inherited disorder that causes cysts (fluid-filled sacs) to develop, primarily in the kidneys. This causes the kidneys to swell and eventually stop working.
- **Deglutition:** the action of moving any substance, solid or liquid, from the mouth to the stomach.
- **Dextrinised cereals:** dextrinising or hydrolysing cereals is a process used to break down complex, long-chain carbohydrates into smaller, more easily digestible pieces. Puréed food that undergoes this process is called dextrinised or hydrolysed cereals.
- **Dysgeusia:** a disorder that alters a person's sense of taste, changing their perception of depth of flavour and causing a persistent metallic taste in their mouth that makes it difficult to identify sweet flavours.
- **Dysphagia:** a digestive condition that makes it difficult to swallow food. It takes more time and effort for people who suffer from this to move food or drink from their mouth to their stomach.
- **Electrolytes:** minerals found in the blood and other bodily fluids. Electrolytes are excreted through sweat when we exercise and through urine. They are also lost when we are suffering from complications such as diarrhoea or vomiting. Consequently, we need to replenish them via fluids or foods that contain them.
- **Genetic counselling units:** places that identify and study hereditary cancer and provide genetic counselling. These units carry out genetic studies, i.e. they analyse family members to determine whether they are carriers of a genetic alteration that is involved in the development of a disease. They also assess individual, and family needs according to the level of risk and offer psychological and social support if necessary.
- **Hormone:** a chemical substance produced by an organ, or part of an organ, that regulates the activity of organs or systems in the human body.
- **Hypogeusia:** a disorder that causes someone to partially lose their sense of taste, making it harder to distinguish between flavours.
- **Lymph nodes:** bean-shaped structures that form part of the immune system. Lymph nodes filter out substances carried by the lymph fluid and contain lymphocytes (white blood cells) that help fight infection and disease. There are hundreds of lymph nodes in the body connected to each other by lymph vessels.

- **Lymphadenectomy:** removal of lymph nodes.
- **Metastasis:** the spread of cancer to an organ other than the one in which it started.
- **Nutrients:** chemical compounds contained in food that provide the body's cells with everything they need to survive. Nutrients have three basic functions in the body: to provide energy for daily activities, to repair and renew tissues and to regulate the chemical reactions that take place in cells.
- **Pathological anatomy:** branch of medicine that uses morphological techniques to study the causes, development, and consequences of diseases.
- **Relapse:** recurrence of cancer.
- **Stage of the disease:** specific stage or period reached in the course of a disease.
- **Thickened water:** refreshing and very hydrating drink that contains a high percentage of water in gel form, with the aim of stimulating deglutition (act of swallowing) by facilitating the production of saliva.
- **Water and electrolyte balance:** see Electrolytes.



**PROMOTERS OF THE
INITIATIVE**



ALCER Renal Foundation
www.alcer.org

ALCER (Association for the Fight Against Kidney Diseases), was created in 1976, established as a Federation in 1981, and in 1984 it was declared of Public Utility. It currently represents people in all kinds of kidney disease in Spain.

ALCER aims to improve the quality of life of people with kidney diseases in all its aspects, promoting the prevention and research of chronic kidney disease, as well as raising awareness about the donation of organs for transplantation. To be the national benchmark in the defense of the interests of people with kidney diseases.

In 2003 was created ALCER Renal Foundation to complete the goals of ALCER Federation in the field of research, training, and publications for kidney patients.



MÁS QUE IDEAS Foundation
www.fundacionmasqueideas.org

MÁS QUE IDEAS Foundation is an independent and non-profit organization that aims to increase the quality of life of today's and tomorrow's patients. We promote innovative projects and activities that provide support and training to patients and their relatives, and the rest of stakeholders. We are fully convinced about the value of networking to get efficient projects focused on people's needs and promote a change in healthcare and get a real patient centered care.

MÁS QUE IDEAS Foundation also aims to be a generator of knowledge as well as a catalyst for ideas and actions that promotes the debate, the reflection, and the progress in healthcare. We all have a common interest –increase the quality of life of society- so should work together and exchange resources and good practices.



IPSEN
www.ipsen.com

Ipsen is a global, mid-sized biopharmaceutical company focused on transformative medicines in oncology, neuroscience, and rare disease. Ipsen provides more than 20 medicines in over 115 countries, with a direct presence in more than 30 countries.

Patients are at the heart of everything we do. We are working with over 220 patient organizations around the world aiming to respond to unmet patient needs, helping to support them, and their caregivers, at different points throughout their experiences. Ensuring open communication with patient organizations is a core part of this commitment. We listen to what is important for people living with medical conditions, their families, and their caregivers, and strive to take action where we are able. To know more on what we do with patients visit our Ipsen.com patient section.

A wooden spoon holder with several spoons, a white cloth with green stripes, and a dark stone wall.

COLLABORATORS

The collaboration of the following organisations has enabled us to include the perspective of multiple disciplines in each chapter of this guide, highlighting the fact that teamwork is essential in our approach to kidney cancer.



asociación
española
contra el cáncer

Spanish Association Against Cancer

www.asociacioncontraelcancer.es

The Spanish Association Against Cancer (AECC) has been the leading organisation in the fight against cancer for 68 years. It is dedicated to showing the reality of cancer in Spain, identifying areas for improvement, and setting in motion a process of social change that enables them to be corrected, in order to obtain a comprehensive and multidisciplinary approach to cancer.

The Association brings together patients, families, volunteers, and professionals who work as a team to prevent, raise awareness, support those affected and fund cancer research projects. Through its Scientific Foundation, the AECC is the social and private organisation that contributes the most funds to cancer research in Spain: €79 million in 400 research projects, more than 1.000 researchers.

It has 52 provincial offices and works in more than 2,000 locations in Spain, with almost 30,000 volunteers, more than 500,000 members and 1,007 professionals. In 2019, the AECC helped 318,264 people affected by the disease.



ACADEMIA
ESPAÑOLA DE
NUTRICIÓN
Y DIETÉTICA

Spanish Academy of Nutrition and Dietetics

www.academianutricionydietetica.org

The Spanish Academy of Nutrition and Dietetics is an institution that represents Spanish nutrition and health professionals with scientific interests in human nutrition and dietetics, giving it the biggest scientific and public recognition in Spain.

The Academy promotes evidence-based nutrition and dietetics and the review, study and scientific positioning of Human Nutrition, Dietetics and Food with no financial conflict of interest.

One of the Academy's aims is to disseminate scientific knowledge of Human Nutrition, Dietetics and Food, looking after the general interests of the population.



Spanish Association of Urology (AEU)

www.aeu.es

A scientific society founded was founded in 1911 with the purpose of promoting the research and study of conditions, both medical and surgical, affecting the urinary secretion and excretion system of both sexes in addition to male genitalia, suprarenal glands, etc., as well as all the changes that occur as a result of said problems. It also promotes and defends the rights and status of Urology specialists and the professional practice of its members.

In order to carry out its scientific work, the AEU organises scientific activities, study groups and national congresses and discusses them in its journal 'Actas Urológicas Españolas'.



Spanish Multidisciplinary Team for Physical Exercise in Kidney Patients (GEMEFER)

www.senefro.org

GEMEFER is a working group approved by the Board of Directors of the Spanish Society of Nephrology (S.E.N.) whose main objective is to encourage and promote physical exercise in kidney patients; both in the different stages of chronic kidney disease and while receiving any type of renal replacement therapy.

It is currently open to all healthcare professionals and kidney patient associations involved in improving the health of kidney patients through exercise.



Spanish Society of Hospital Pharmacists (SEFH)

www.sefh.es

The Spanish Society of Hospital Pharmacists (SEFH) is a scientific, private, active, and professional non-profit organisation dedicated to increase the state of knowledge about the hospital pharmacy and whose actions seek to improve patient health outcomes through the appropriate and safe use of medicines.



Spanish Group for the Development of Oncology Pharmacy (GEDEFO)

gruposdetrabajo.sefh.es/gedefo

The Spanish Group for the Development of Oncology Pharmacy (GEDEFO) was founded at the end of 1995 with the aim of creating a specific framework to facilitate training in the field of haemato-oncology and to increase collaboration and the exchange of knowledge and experience in this field among hospital pharmacists. In 2002, it was renamed as the Spanish Foundation for the Development of Oncology Pharmacy and in 2013 the foundation was dissolved and integrated as a working group of the Spanish Society of Hospital Pharmacists (SEFH), maintaining its objective to improve care for haemato-oncology patients through training, research, and the further development of oncology pharmacy.



Spanish Society of Endocrinology and Nutrition (SEEN)

www.seen.es

The Spanish Society of Endocrinology and Nutrition (SEEN) is a scientific society of endocrinologists, biochemists, biologists, and other specialists in the field of endocrinology, nutrition, and metabolism, that work to further their knowledge and raise awareness of their work.

SEEN currently has 1,700 members, all of whom are involved in the study of hormones, metabolism, and nutrition. It is recognised as a leading scientific society in these fields whose objectives include discovering new knowledge and introducing it to the healthcare system, thereby improving the diagnosis and treatment of patients with endocrinological and/or nutritional diseases.



Spanish Society of Nephrology (S.E.N)

www.senefro.org

Scientific society that brings together specialists in the branch of medicine that deals with kidney diseases and works in three areas: care, teaching and research.

It currently has almost 2,500 members and its mission is: to promote research, training and the dissemination of knowledge in each area of Nephrology (Kidney Disease, High Blood Pressure, Dialysis and Transplants, Diagnostic and Interventional Nephrology and Fluid and Electrolyte disorders), in order to provide an excellent treatment and help the population to maintain healthy kidneys, through prevention and care, as well as to represent the professional aspirations of the members of our Scientific Society.



Radiotherapy Oncology Society in Spain (SEOR)

www.seor.es

The Radiotherapy Oncology Society in Spain (SEOR) brings together more than 1,000 Spanish and foreign specialist physicians (including doctors in training) whose work is mainly developed in the treatment of cancer and other non-neoplastic diseases, through the use of radiation exclusively or no in association with other therapeutic modalities (surgery, chemotherapy, bio-drugs).

SEOR organizes different working research groups, develops guidelines and also patient guides that can be consulted at the website, alongside other relevant information.



Spanish Genitourinary Oncology Group (SOGUG)

www.sogug.es

Not-for-profit association whose main objectives are to promote clinical and translational research and continuous training in the field of genitourinary tumours, providing information and support to patients with these pathologies and raising awareness in society.

The group has led multicentre trials at all stages in prostate, kidney, and bladder cancer, among others. It has also worked extensively in the field of translational research, promoting collaboration between clinical and basic researchers as a key element for the progression towards individualised treatments.

English translation provided by:



International Kidney Cancer Coalition (IKCC)

www.ikcc.org

The International Kidney Cancer Coalition (IKCC) is an independent international network of over 45 patient organisations that focus exclusively, or include a specific focus, on kidney cancer. Based in the Netherlands, the organisation was born from a very strong desire among various national kidney cancer patient groups to network, cooperate and share materials, knowledge, and experiences around the world.

Kidney cancer is a global issue. Every year, an estimated 431,000 people worldwide will be diagnosed with kidney cancer. By working together and collecting the experiences of many patients in different countries, we represent the perspectives, insights, and experiences of kidney cancer patients around the world and empower the kidney cancer community through advocacy, awareness, information, and research.

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KIDNEY CANCER DIET & NUTRITION

A guide for patients
and their families



MY NOTES

This is a section for you. You can write down your thoughts, recipes, what to remember or the goals you want to achieve.



MY NOTES

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