



# Nutrition for Adults with CF

Optimising nutrition and maintaining a healthy weight in people with CF, has a known positive effect on lung function. Adequate nutrition is important to achieve:

- Reduced/less lung infections.
- Improved immunity to fight and recover quicker from infections.
- Improvements in growth.
- Maintaining lung function and exercise tolerance.
- Improved wellbeing and energy for everyday activities.
- Less risk of health complications associated with CF.

# **Dietary Review**

At least once a year, people with CF should:

- Meet with the CF dietitian to review diet, supplemental vitamins and enzymes.
- Create a plan together- set clear goals regarding weight and/or diet.
- Have blood levels of fat-soluble vitamins checked.
- Ask about having an oral glucose tolerance test to check for CF Related Diabetes.

### Diet

Individuals with CF have greater nutritional needs, in particular energy (or calories), compared to the general populations. This is due to the high amount of energy the body uses to breathe, cough, fight infection in the lungs and poor fat digestion.

Historically, people with CF required a high fat diet, however with recent advancements in treatment options, this is no longer the standard recommendation for everyone.



Each person's requirements are different depending on their age, gender, physical activity, disease state, lung function, medications and medical history.

People with increased needs, such as those who are experiencing poor growth or recurrent illnesses, may be encouraged to follow a higher energy diet. However, this is individualised and should be discussed with and monitored by your CF team.

It is important to follow a balanced diet including all food groups (unless otherwise advised) such as grains and cereals, fruits and vegetables, dairy products and protein foods like meat, chicken, fish, legumes, nuts and eggs.

### **Enzymes**

Approximately 90% of people with CF are pancreatic insufficient, meaning the pancreas is unable to produce enough digestive enzymes needed for the normal digestion of fat, protein and carbohydrates in food. To manage this, most people will take pancreatic enzymes capsules with food to aid in digestion.

## Vitamins

People with CF, particularly those who are pancreatic insufficient, often have deficiencies in 'fat-soluble' vitamins A, D, E and K due to the body's limited or total inability to absorb these vitamins. VitABDECK is a CF-specific multivitamin that is generally prescribed to people with CF.

# Salt

People with CF lose large amounts of sodium and chloride (minerals that make up salt) in their sweat, therefore these minerals need to be supplemented through diet and/or supplements. Ensuring adequate salt intake is important to prevent low salt levels in the body which can lead to dehydration and symptoms such as fatigue, nausea, muscle cramps and thicker mucus. The amount of salt replacement needed for each individual varies according to symptoms, dietary intake, climate and activity levels.

# **Reaching your goal weight**

For some people with CF, achieving and maintaining a healthy weight can be a challenge. Your dietitian can help by assessing various aspects of your diet, including energy intake and dietary patterns, enzyme dosage, use of nutritional support, food and nutrition related knowledge, energy demands from illness, exercise and more.

They can also screen for comorbidities which may contribute to undernutrition, such as CF related diabetes, bowel issues including irritable bowel syndrome and DIOS, liver disease, coeliac disease, hyperthyroidism and much more. Being underweight can be caused by many factors so a whole team approach is best. Your dietitian will work alongside your CF team, including respiratory physician, gastroenterologist, endocrinologist, psychologist, social worker and physiotherapist to help create a plan.

# Weight management

Whilst traditionally the focus has been around nutrition support for weight gain, there is an emerging issue of overweight and obesity in the CF population. This can be partially attributed to treatment advances and new modulator drugs, in addition to the increasing prevalence of obesity in the general population. With improving life expectancies, it is important to consider the long-term impacts of being overweight, which may include heart disease, high blood pressure and sleep apnoea. It is important to monitor your weight at clinic appointments and work with your CF dietitian to help you achieve and maintain a healthy weight. They can help you set goals, create a healthy meal plan and work with the physio to make sure you are getting enough exercise, and that your diet supports this.

# **Useful resources**

<u>Nutrition for Adults</u> (CFWA)