



NAME:

KITID:

DATE TESTED:

Discover your path to





**INTRODUCTION** 

**YOUR RESULTS** 

**DIET** 

**LIFESTYLE** 

**SUPPORT** 





## **Disclaimer and Limitations**

The information in this report reflects research to date on the relevance of Copy Number Variation (CNV) in the AMY1 gene. Genetic research is rapidly increasing and our understanding of AMY1 CNV will increase over time, and so the content of future reports may vary from this one.

Research has indicated a correlation between AMY1 copy number variation (represented here as your "CarbChoice number") and the production of salivary amylase and, hence, the ability to break down starchy carbohydrates. This report therefore outlines the potential impact of CarbChoice number on general health and fitness and provides intervention suggestions that may be of assistance. However, there are many influences on your weight management success and sports performance including lifestyle, environmental and additional genetic effects which are not included in this report.

People with special dietary considerations or health conditions, such as allergies or intolerances, women who are pregnant, seeking to become pregnant, breastfeeding or minors, should seek advice from a qualified health practitioner before undertaking this test.





# Congratulations on making the choice to improve your health and wellbeing!

Your CarbChoice report is designed to guide you on your journey toward better long-term health and wellbeing. You can use this information to prepare a personalised diet, exercise and wellness plan that supports your individual needs for making the right choices around starch carbohydrates.

## What you will learn from your CarbChoice profile

Your potential genetic predisposition to processing starch carbohydrates.

How much starchy carbohydrate might be suitable for you.

Foods and ingredients to include as part of your daily diet supporting optimal starch carbohydrate processing.

Foods to avoid or minimise to support your weight management goals and nutritional needs.

Foods to increase your amylase levels to support better starch carbohydrate



# CarbChoice

## **CarbChoice Results in Perspective**

Scientific studies have shown there are variations in the human salivary alpha-amylase gene (AMY1) which may influence how effectively individuals break down and process starchy carbohydrates (Perry et al. 2007) meaning some people may be able to tolerate these carbohydrates better than others.

Over time, the AMY1 gene has evolved in humans to have an increased number of copies. While the average copy number is six, it can range from 1 to over 20. (Marcovecchio et al. 2016).

Research has linked the adaptation to a high-starch diet to this variation, as the additional copies of AMY1 may improve the ability to digest starch carbohydrates (Perry et al. 2007).

There is scientific evidence to support that the types of carbohydrate consumed, how the food is prepared and eaten are all important for weight control and health outcomes. For those with reduced ability to process starch carbohydrates, a selection of appropriate high fibre carbohydrates may be an alternative to a low carbohydrate diet.

Low Carbohydrate diets have been demonstrated to be an effective approach for weight loss; when compared to low-fat diets they have been shown to help with weight loss and to improve the metabolic risk factors associated with diabetes and cardiovascular disease (high triglycerides, low HDL, high blood sugar).

Some individuals feel well on a low carbohydrate diet (low carb, low GI etc.) while others may feel fatigued, moody and have difficulty concentrating.





Your CarbChoice profile reveals whether your starch carbohydrate processing activity falls into one of three ranges:



### **Low Activity Processing**

Individuals who are low processing should decrease their intake of starch carbohydrate and consider changing to higher fibre carbohydrates. High starch carbohydrate intake is associated with a greater risk of obesity, insulin resistance and diabetes.



#### **Moderate Activity Processing**

Individuals with moderate processing ability can tolerate more starch carbohydrate such as grains. High starch carbohydrate intake is associated with a higher risk of weight management issues and related problems.



## **Higher Activity Processing**

Individuals with high range processing ability can tolerate a higher level of starch carbohydrate intake, such as grains which has less impact on weight management and insulin levels.

They have a lower risk of obesity.

