BREAKFAST CEREALS FOR A HEALTHIER HEART

With Cardiovascular Disease (CVD) causing more than a quarter (27%) of all deaths in the UK, and over half the adult population recording raised cholesterol levels [BHF 2016], measures to reduce risk are increasingly important. Lowering blood cholesterol levels can be a key factor in reducing the risk of CVD. Choosing breakfast cereals rich in beta-glucan and low in saturated fat, may help to lower blood cholesterol.

OAT BETA-GLUCAN (OAT β-GLUCAN)

β-Glucans are soluble fibres composed of glucose molecules in long polymers. Oat β-glucan occurs naturally in the bran of oats, and is particularly concentrated in the outer layers of the grain. Due to its solubility, it dissolves inside the digestive tract forming a thick gel. The gel is able to bind with cholesterol, and cholesterol like substances such as bile, within the digestive tract and prevent absorption into the body.

CHOLESTEROL LOWERING PROPERTIES

Evidence suggests that oat β-glucan can lower both total, and harmful LDL cholesterol. This is achieved by three potential pathways:-

1) Preventing cholesterol in foods from being absorbed
2) Preventing cholesterol like substances in bile being reabsorbed
3) Causing more cholesterol to be removed from the blood

Meta-analysis studies conducted over the past 25 years have confirmed a cholesterol lowering benefit of oat β-glucan [Ripsin et al 1992; Brown et al 1999; Whitehead 2014]. Reductions in total and LDL cholesterol were shown in both normal and hypercholesterolaemic individuals, however HDL cholesterol levels were unaffected.

RECOMMENDED INTAKES AND SOURCES

Evidence submitted to the European Food Safety Authority (EFSA) has resulted in the following health claim being permitted:

‘Oat β-Glucan has been shown to lower/reduce blood cholesterol. High cholesterol is a risk factor in the development of coronary heart disease.’

The evidence suggests an intake of 3g of oat β-glucan per day (in adults) will have a significant effect on lowering blood cholesterol levels [EFSA 2010].

NESTLÉ BREAKFAST CEREALS AND HEART HEALTH

Foods which are low in saturated fat, but rich in whole grains and oat β-glucan have been shown to have a positive effect on blood cholesterol levels, and therefore heart health.

New Nestlé CHEERIOS OAT CRISP and Nestlé CHEERIOS CINNAMON OAT CRISP have been specifically developed to contain wholegrain oats and additional oat fibre, with 3.8g oat β-glucan per 100g, and 1.5g per serving. The Nestlé Cereals range also includes SHREDDED WHEAT - made with 100% wholegrain wheat, low in saturated fat and approved by Heart UK. Every Nestlé cereal with the green banner contains at least 8g of whole grain per serving.

FOODS WHICH ARE LOW IN SATURATED FAT

Consumption of foods low in saturated fats has also been recognised as a key factor for heart health. EFSA reviewed the association between foods lower in saturated fat and cholesterol levels in 2011, and concluded that ‘Consumption of saturated fat increases blood cholesterol concentrations; consumption of foods with reduced amounts of saturated fat may help to maintain normal blood cholesterol concentrations’ [EFSA 2011].

References