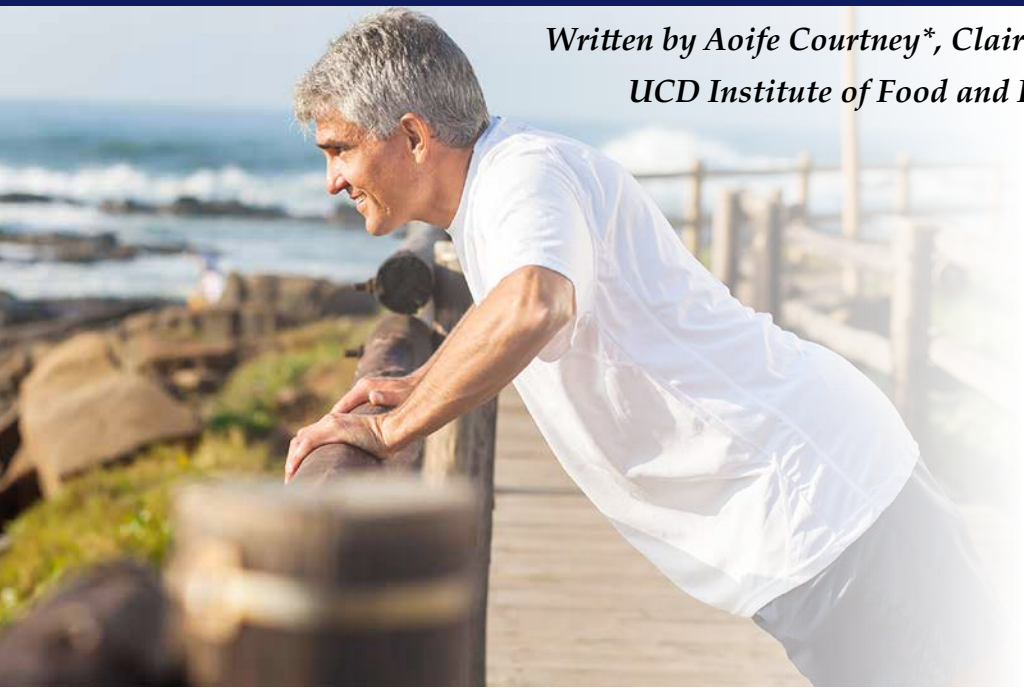
Men's Health and Nutrition



Written by Aoife Courtney, Claire Connolly* and Lorraine Brennan*

UCD Institute of Food and Health, UCD School of Agriculture and Food Science, Dublin.

**Both authors contributed equally*

1.Introduction

The foods and beverages we consume have a significant impact on our health. Scientific evidence has guided the generation of our dietary guidelines with the objective to promote health and prevent disease. Despite the development of the dietary guidelines, a significant proportion of our population do not meet these guidelines. Furthermore, requirements for men and women differ at different life stages. With this in mind, the present article focuses on key nutrients and foods important for men's health highlighting those that are not consumed at the level of current recommendations (figure 1 on page 30).

2.Fibre

Dietary fibre is a major concern in the Irish diet with a reported mean daily intake for males aged 18-64 years of 21.1g/day compared to the recommended intake of 25g/day. A similar inadequate intake was observed in the older male cohort of 65 years and older.[1] As reported in National Adult Nutrition Survey (NANS) 2011, the main contributors to daily dietary fibre intake included breads, potatoes, and vegetables – which was similar across both male age groups. Inadequate intake of fibre is associated with a variety of health implications including gastrointestinal diseases such as bowel cancer. Bowel cancer is a prevalent cancer in Ireland, accounting for 11% of cancer related deaths in Ireland.[2] Research has demonstrated the protective effect dietary fibre intake of colorectal cancer.[3] Increasing the consumption of various pulses such as beans, peas, oats, or lentils as well as fruit and vegetables is beneficial in increasing the intake of dietary fibre.[4]

3.Saturated Fat

Data from Ireland has revealed that the intake of saturated fat (SFA) was estimated at 14% of total energy intake well above the recommended intake.[5] The Food Safety Authority of Ireland (FSAI) 2011 Healthy eating guidelines recommends SFA intake should not exceed 10% of daily energy intake.[6] SFA increases blood cholesterol concentration, which contributes to increased incidence of heart disease. Foods high in SFA include butter spreads, cream, full fat dairy products, fat on meat, processed meats, cakes, biscuits, and confectionary.

Methods to reduce saturated fat intake without excluding food groups from the diet include choosing lean cuts of meat or poultry and removing skin on poultry or visible fat on the meat. In addition to this, reducing the consumption of foods such as cakes, biscuits and confectionary will contribute to a lowering SFA intake. Furthermore, replacing SFA in diet with mono-unsaturated fatty acids (MUFA) or poly-unsaturated fatty acids (PUFA) can be beneficial. Sources of MUFA include olive oil and nuts, and main dietary contributors for PUFA include oily fish such as salmon and mackerel and seeds such as sunflower and flaxseed. Increasing MUFA and PUFA in the diet is supported by emerging evidence of the health benefits of the Mediterranean diet in terms of cardiovascular disease (CVD).

4.Salt Intake

The population of Ireland consume double the recommended intake of salt daily.[1] The recommended daily allowance (RDA) of salt is 4g per day. Higher intakes of salt are associated with high blood pressure, one of the predominant modifiable risk factors for CVD. The NANS 2011 survey reported that males aged 18-64 years old in Ireland, had an average intake of 8.5g, more than twice the RDA.[1] In addition to this, males over 65 years had a mean daily intake of 7.3g.[1] The predominant contributors in the diet to salt intake included breads (22%) and processed meats (20%). Reduction in salt intake can result in a significant decrease in blood pressure.[7] Different methods to reduce salt intake include the introduction of different seasonings or spices to recipes, therefore reducing the need for salt, removing, or reducing the consumption of foods such as pre-made meals, fast food, processed meats and salted savoury snacks.

5.Vitamin D

Vitamin D is a fat-soluble vitamin which is important for healthy bones and overall health throughout all life stages.[8,9] Other micronutrients such as calcium rely on adequate levels of vitamin D for absorption. Although recent research suggests that there are associations between vitamin D and other health conditions (e.g., CVD; diabetes; inflammatory and certain cancers), there is not enough evidence to prove causation between vitamin D status and non-skeletal health.[8] Vitamin D is obtained in the diet (via foods that are naturally rich in vitamin D, fortified foods, and supplements) and sunlight. Due to Ireland's geographical location, it can be challenging for people living in Ireland to obtain enough vitamin D from the sun in the Autumn and Winter months.

The food consumption data (NANS, 2011) reported that 72% of men aged 18-64 years old had average daily vitamin D intakes of less than 5 µg, and over 90% had average daily intakes of less than 10 µg.[1] For older adult men, 59% had mean daily intakes of vitamin D less than 5 µg, with 87% of men having mean daily intakes of less than 10 µg.[1] While natural vitamin D sources and vitamin D-fortified foods make important dietary contributions, the FSAI highlighted in 2020 that food sources alone are not sufficient to for adequate vitamin D intake and therefore vitamin D supplements are also needed at certain times of the year.[9]

Based on this information, males (and females) living in Ireland aged 5-64 years old and healthy community-dwelling older adults (aged 65 years and older) are advised to take a daily vitamin D supplement of 10 µg (400IU) from October to March, or all year round if i) dark skinned ii) house-bound, or iii) mostly covered up when outdoors. For older adults who are i) house-bound or ii) have minimal or no sunlight exposure, a daily 15 µg (600IU) vitamin D supplement is required all year round.[9] In addition to supplementation, the FSAI recommends the regular consumption of foods that are good sources of vitamin D. Foods rich in vitamin D include oily fish (e.g., salmon, sardines, and mackerel), egg yolks, and fortified foods (e.g., spreads, milk and breakfast cereals).[1]