

Kristians Savickis

Sports and exercise science

Nutrition

The University of Wales Trinity Saint David

This assignment will outline the development of the Dietary Reference Values in the United Kingdom and will include the role of the Scientific Advisory Committee on Nutrition. A discussion based upon the role of the Eat Well Guide will be included for a chosen group and how guidelines are adopted in practical advice.

The chosen group that will be focussed on throughout this assignment will be adults. The rationale for this is that it is of high interest to the author, with enthusiasm to expand their knowledge.

Dietary Reference Values

The Dietary Reference Values (DRV) play a crucial role in providing comprehensive and accurate estimations for the food energy needs of adults in the United Kingdom. By establishing specific criteria, these values assess the adequacy of individuals' intake of food energy, ensuring that their nutritional requirements are met. The primary objective of the DRV is to set an example that demonstrates the levels of energy intake required for weight maintenance among adult individuals in the UK. These values serve as a cornerstone for guiding not only individuals but also healthcare professionals in understanding and addressing the dietary needs of the population. The process of determining the DRV involves extensive research and analysis of scientific evidence. Diligent scientific studies are conducted to gain insights into the relationship between energy intake and factors such as age, sex, physical activity level and metabolic rate, among others. By integrating this information, the DRV strive to provide accurate estimates that consider the unique characteristics and requirements of adults (Department of Health, 1991).

Through its comprehensive approach, the DRV aims to promote optimal health and well-being by ensuring that individuals consume sufficient amounts of energy from their diets. This is vital as energy serves as the fuel that powers various physiological processes, including metabolism, growth and physical activities. Furthermore, the DRV also serve as a valuable tool for assessing and addressing potential energy imbalances among individuals. By quantifying the amount of energy required for weight maintenance, these values can help identify cases of undernutrition or overnutrition, enabling appropriate interventions and support to be provided.

In summary, the Dietary Reference Values in the UK strive to establish high standard estimations for adults' energy needs. By considering various factors and incorporating scientific evidence, these values provide a comprehensive framework for assessing and promoting adequate energy

intake (S Lanhan-New et al, 2020). Ultimately, the DRV play a significant role in guiding individuals and healthcare professionals to ensure optimal nutritional outcomes in the adult population. The table below shows the adult's Estimated Average Requirements for energy British Nutrition Foundation. (2021). Nutrient requirements.

EARs for Adults					
Age	Males		Females		
	MJ/day	kcal/day	MJ/day	kcal/day	
19-24 Years	11.6	2772	9.1	2175	
25-34 Years	11.5	2749	9.1	2175	
35-44 Years	11.0	2629	8.8	2103	
45-54 Years	10.8	2581	8.8	2103	
55-64 Years	10.8	2581	8.7	2079	
65-74 Years	9.8	2342	7.7	1912	
75+ Years	9.6	2294	8.7	1840	

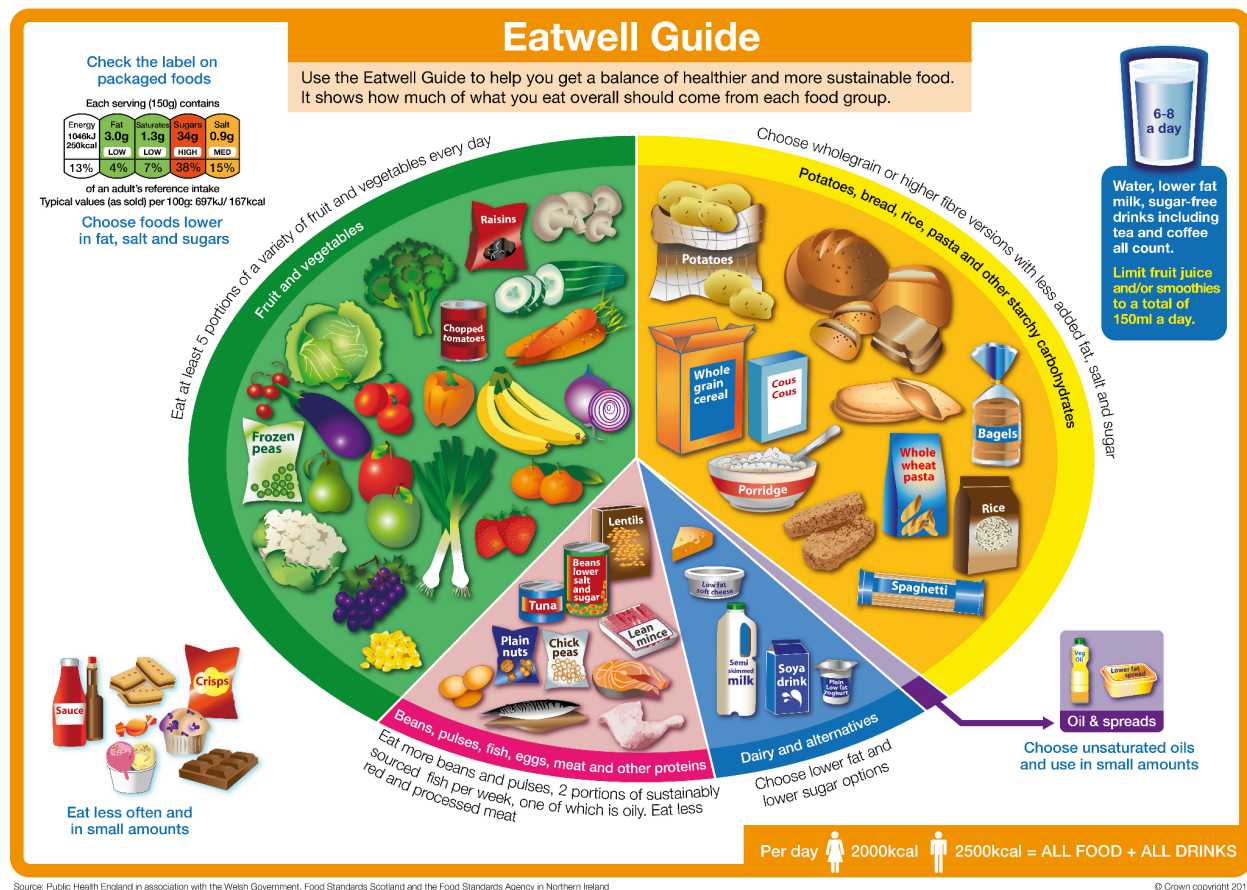
The dietary reference values for macronutrients such as carbohydrates, proteins and fats are placed to ensure that the general public is consuming a balanced diet, that supports energy needs and helps with overall health. Within adults, the energy requirements can differ, based on factors such as gender, age, weight, activity level and overall health. The average energy intake for adults is about 2,000 to 2,500 kcal per day, with different variations depending on activity level (Department of Health and Social Care, 2016). The source (Institute of Medicine, 2005) outlines the recommended macronutrient distribution for energy intake is 45-65% of total energy should come from carbohydrates, 20-35% from fats and 10-35% from proteins. Carbohydrates are one of the body's primary sources of energy, when consumed they are broken down into glucose. Glucose is then used by the body's cells to generate energy, proteins play a huge role in tissue repair, immune function and enzyme production. The importance of fats plays a role in brain health and the absorption of fat-soluble vitamins such as A, D, E and K (Gibney et al, 2009).

Dietary reference values have served as a foundation for public health guidelines, their aim is to ensure that the population meet their nutritional requirements to have a healthy life and avoid any deficiencies. The development of dietary reference values in the United Kingdom has been an evolving process, backed by advances in nutritional science and more evidence based on

health risks associated with poor diet (Department for Health, 1991). Dietary reference values started as a standard dietary recommendation to ensure the public was consuming the right nutrients. As more data became available on how nutrition played a role in chronic diseases, there was an increased understanding of the importance in nutrition, not just in preventing deficiency but also contributing to long-term health and reducing the risk of conditions like heart disease, obesity and diabetes. This development of the dietary reference values in the UK leads to reflect not only the amounts of nutrients required for survival but also those necessary for optimal health outcomes (Department of health, 1991). The role of scientific advisory committee on nutrition (SACN) has played a pivotal role in the development and review of dietary guidelines and dietary reference values in the UK. The SACN has a team composed of nutritionists, scientists and public health professionals, to study and evaluate scientific evidence on nutrition and provide advice to the UK government (SACN, 2011). The main responsibility of SACN is to review and update the dietary reference values in the results of new studies and research, ensuring the UK dietary guidelines remain evidence-based and aligned with current scientific knowledge. In 2011 the SACN conducted research on vitamin D and calcium, which resulted in these dietary reference values being updated. The Scientific Advisory Committee's recommendations on vitamin D were based on new evidence regarding its role in bone health and immune function, leading to an increase in the daily recommended intake of vitamin D, especially in the developing concerns of vitamin D deficiency in the UK population (SACN, 2016). The evolution of DRVs in the UK has had a major impact on public health policy, causing the government dietary guidelines to make changes such as food labelling and nutritional education campaigns. For example, the SACN's review of salt intake in 2003 and its recommendation for reducing sodium consumption have developed into ongoing public health campaigns aimed at lowering salt intake across the population, which has been linked to a reduction in the risk of hypertension and cardiovascular disease (SACN, 2003).

The Eat Well Guide plays a key role in public health policy in the UK, it was developed to offer dietary advice and help the population maintain a balanced and healthy diet. Created by the government the purpose of the Eat Well Guide is to provide a visual representation of the different food groups and types that make up a healthy diet for adults, it shows the importance of consuming a variety of different foods, ensuring they reach their dietary references values and getting the right amounts of energy, protein, vitamins, minerals and fibre. The Eat Well Guide is designed to make nutritional guidelines easier to understand and help make healthier food choices (Public Health England, 2016). The Eat Well Guide separates the foods into several different categories, each group representing a different daily nutrient needed for the body. A large part of the guide is dedicated to starchy carbohydrates, such as bread, pasta and rice, which is the main source of energy. The guide also splits into another section where it encourages the consumption of fruits and vegetables, trying to highlight the importance of consuming at least 5 portions a day. Smaller sections such as proteins and fats are allocated and should be consumed in moderation (Public Health England, 2016). The Eat Well Guide's goal is to help reduce the

risk of obesity, heart disease, diabetes and other diet-related conditions. The guide further helps with weight management by portion control and the lowering of foods high in salt, sugar and saturated fats, which have been linked to various health issues. The Eat Well Guide leads the way as a valuable tool for adults aiming to improve their diet and develop a long-term healthy lifestyle, by being a very easy-to-access and understandable guide (Public Health England, 2016).



(Public Health England, 2016)

Conclusion

In conclusion, Dietary reference values play a huge role in guiding the nutritional needs of adults in the United Kingdom, providing studies and evidence-based recommendations for energy intake and the balance of micronutrients. The Scientific Advisory Committee on Nutrition has been crucial in updating and correcting these guidelines, ensuring they follow the latest scientific evidence, mainly in areas such as vitamin D, calcium and salt intake. The Eat Well Guide is another tool with its aim to promote healthy eating among adults. The guide simplifies complex dietary recommendations into an accessible and easy-to-understand image.

Word count - 1510

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