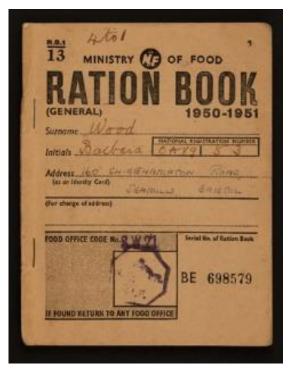
23. Ration Book

This ration book dates to the early 1950s and belonged to vegetarian and onetime child evacuee, Barbara Wood. In this piece Professor Julie A. Lovegrove (Director) and Dr Rosalind Fallaize (Research Fellow) of the Hugh Sinclair Unit of Human Nutrition, University of Reading, share their reflections on wartime and post-war rationing, mid-century food survey work, and contemporary work in nutritional science.

Ministry of Food, Ration book and coupons, 1950-1951



Early-1950s ration book belonging to onetime evacuee and vegetarian, Barbara Wood (MERL 2019/55).

Rationing began on 8 January 1940 as a means of ensuring fair distribution of food. Led by Professor Jack Drummond, Government policy also centred on increasing home production and implementation of social and nutritional policy, with the aim of ensuring that the entire nation was adequately fed. The 'Dig for Victory' and 'Grow Your Own' campaigns were examples of Government campaigns encouraging the growing of fruits and vegetables in gardens and allotments. Rationing was overseen by the Ministry of Food with around 1300 Local Food Offices involved in the distribution of ration books, licensing of food dealers, and enforcing of orders. Basic foods such as meat, fats, cheese, and sugar were directly rationed from a registered retailer, via coupons. Whereas a points system was used for food items deemed less essential, including cereals, rice, and some canned foods, thus giving some choice and flexibility to families. Rationing lasted 14 years with meat the last item to be de-rationed.







A signed copy of this Grow Your Own poster designed by Abram Games is held by the Museum (MERL 2009/9)

When rationing was first introduced, vegetarian societies entered negotiations with the UK Government to increase the allowance of eggs, cheese, and nuts for vegetarians in exchange for meat rations. However, it wasn't until 1942 that they succeeded in getting a greater allowance, with registered vegetarians allocated 2 eggs per week (instead of 1) and an extra 50g/2oz of cheese per week (75g/3oz instead of 25g/1oz). During this period, around 50,000 people, including children, were registered as vegetarians, although it is thought that some did this to receive extra cheese (Twigg, 1981).



Barbara Wood's 1950s ration book contains coupons for sweets, a 1947-1948 clothing booklet, and evidence of her vegetarian allowance (MERL 2019/55).





In contrast to 1942, we now have access to a wide range of plant-based products which can be eaten as replacements for animal-based foods such as meat, eggs, fish and dairy products. These are based on, for example, textured vegetable protein, often soy, fungi, peas, nuts, and pulses. In 2019, it was estimated that approximately 2–3% of the UK population followed a vegetarian or vegan diet (1.3–2 million people) a marked increase from the 1940s. In recent years, plant-based diets have been linked to lower risk of diseases such as heart disease and type 2 diabetes. However, the motivation to eat a more plant-based diets is often driven by an ambition to adopt a more environmentally sustainable diet, particularly in adolescents. This has seen consumption of plant-based products soar in the UK in recent years. While a balanced vegetarian or vegan diet can be healthful, diets low in animal products (particularly meat) may impact intake of key minerals such as zinc and iron (Hobbs-Grimmer, 2021). To 'reconcile the nutritional and environmental science', the British Dietetic Association recently launched the One Blue Dot campaign and Environmentally Sustainable Diets Toolkit.

FOOD SUPPLY (page 3) Please enter below all the food you use, whether bought, taken from store, obtained from allotment or given you. If bought, please enter the price.							
Date	Amount	Kind	Total cost	Cost per unit	OFFIC	E USE ONL	Y
26.7.	1.0	Sugar			16	72_	53a
26.7.	1-0	Tea			2 10	16	37 m
	10	Butter			17	16	31a
	1-2	land.			10	18	33b
	1-8	Rafe			72	24	356
- !	1.0	" '			9	16	35a
!	8	Biscints sweet.			6	8	7+
	8	sweets buled		1135735	16	8	536
	1.0	Rue.			7	16	Se
	4				6	4	57c
	1.0	Born Back.			2 2	16	12 c
	2	Blancmarge			2'2	2	Sa
	5	Iella.			6	5	53k
28.7.	3	well.	Te Line	N.77-5	× o	60	240
	3	h			11/2	60	240
29 7	3			N.M.S	× 6	60	240
29.7.	. 3	4			1 12	60	240
	10-	Buad			18	160	12
	1-0	Brown "			34	18	10

Example of an ONS return sheet focussed on 'Food Supply' (for details of wider archive see listings below).

Exploring the health benefits and/or limitations and consequences of diets is a key ambition of the Hugh Sinclair Unit of Human Nutrition at the University of Reading, which was founded in 1995 with funds from the estate and legacy of the late Professor Hugh Macdonald Sinclair (1910–1990), with the mission to 'strengthen the evidence base for dietary recommendations for the prevention of chronic





disease.' Hugh Sinclair was a pioneer and passionate advocate of nutrition, famously leading the Government-commissioned Oxford Nutrition Surveys (ONS) during the Second World War. The ONS aimed to monitor the health of the nation under rationing, and included assessment of food intake, nutrient status, and health.

The ONS surveys, which were conducted in a variety of civilian groups during the Second World War, are now held at The MERL. The results of these surveys largely indicated that the diet and health of the nation was well maintained and highlight the importance of ensuring adequacy during time of insecurity. Shockingly, food insecurity appears worse now than during the War, with 1 in 12 households identified as food insecure in the UK Government's Family Resources Survey 2019/20. This has been exacerbated by the Covid-19 pandemic, with people who are less financially secure experiencing their diets worsening. The mitigation measures arising from the pandemic, including the Government-enforced lockdowns, the first in March 2020, also resulted in food shortages, and purchasing limits being placed on staple items such as flour, dried pasta, eggs, and some tinned products. One benefit that arose during the pandemic that echoed the nation's aspiration during the Second World War, was the ambition to increase home production of fruit and vegetables in gardens and community allotments.

Professor Hugh Sinclair expressed concern over the dietary survey method used in the ONS, finding it to be laborious, costly, and inaccurate, with 'errors at all stages of data collection and calculation' (Sinclair, 1944), although it was one of the most comprehensive food surveys of the time. Accurate assessment of food and drink intake remains a challenge, and researchers at the Hugh Sinclair Unit of Human Nutrition are working to improve current methods. Recently they have developed a novel webapp, eNutri, capable of accurately assessing dietary intake and diet quality. This app is currently being used to survey intakes in older adults and has previously been used to successfully deliver personalised dietary advice that improved overall diet quality more effectively than general population guidelines.

One of the key public health recommendations for prevention of chronic diseases, such as cancers and heart diseases, is eating at least five portions of a variety of fruits and vegetables a day (one portion being 80g of fresh fruit or vegetables). This has clear health benefits, some of which have been explored by researchers at the Hugh Sinclair Unit of Human Nutrition. These include flavonoid-rich fruit and vegetables, beetroot (juice and bread), grapefruit juice, blueberries, and apples. This research has shown that blueberries, rich in flavonoids can improve cognitive function (Williams et al., 2008) and eating two apples a day reduced blood cholesterol and improved blood vessels health, reducing risk of heart disease (Koutsos et al. 2020). The MERL holds Professor Hugh Sinclair's extensive archives and many other impressive collections that researchers from the Hugh Sinclair Unit of Human Nutrition continue to explore to learn valuable lessons from the past.





Further Information (online):

For further information about the ration book see - MERL

For the British Dietetic Association One Blue Dot campaign and Environmentally Sustainable Diets Toolkit see – https://www.bda.uk.com/resource/one-blue-dot.html

For more information about the Hugh Sinclair Unit of Human Nutrition see – https://www.reading.ac.uk/HSUHN/Home/hsuhn-homepage.aspx

Find out more about the Hugh Sinclair archival material held at The MERL – https://merl.reading.ac.uk/collections/sinclair-hugh-macdonald/

Watch a short film about Hugh Sinclair and the archive – Hugh Sinclair and Human Nutrition

Find out more about Barbara Wood's evacuee experiences here – https://merl.reading.ac.uk/wp-content/uploads/sites/20/2018/06/B19317-MERL-LR-03-Evacuee-2-Wood-3.pdf

Further Reading (as cited in text):

Hobbs-Grimmer, DA., Givens, DI., Lovegrove, JA. (2021). 'Associations between red meat, processed red meat and total red and processed red meat consumption, nutritional adequacy and markers of health and cardiometabolic diseases in British adults: a cross-sectional analysis using data from UK National Diet and Nutrition Survey', European Journal of Nutrition. [2021 Feb 7. doi: 10.1007/s00394-021-02486-3. Epub ahead of print. PMID: 33554272].

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Twigg, J. (1981) The vegetarian movement in England, 1847-1981: A study in the structure of its ideology [accessed 05/04/2021 via https://ivu.org/history/thesis/ww2.html]

Williams, CM., El Mohsen, MA., Vauzour, D., Rendeiro, C., Butler, LT., Ellis, JA., Whiteman, M., Spencer, JP. (2008). 'Blueberry-induced changes in spatial working memory correlate with changes in hippocampal CREB phosphorylation and brain derived neurotrophic factor (BDNF) levels', Free Radical Biological Medicine 45, pp.295-305.



