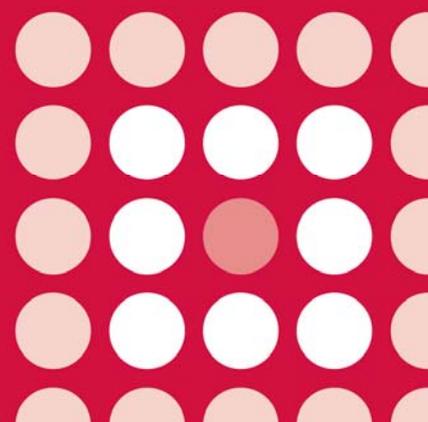




All Wales Therapeutics  
and Toxicology Centre  
Canolfan Therapiwteg a  
Thocsicoleg Cymru Gyfan

## PRIMARY CARE PRESCRIBING ANALYSIS 2012-2013

### GLUTEN-FREE PRODUCTS



This report has been prepared by the Welsh Analytical Prescribing Support Unit (WAPSU), part of the All Wales Therapeutics and Toxicology Centre (AWTTC).

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## PRIMARY CARE PRESCRIBING ANALYSIS 2012–13

### GLUTEN-FREE PRODUCTS

#### RECOMMENDATIONS:

- To continue to promote the appropriate prescribing of gluten-free products in line with AWMSG endorsed All Wales Guide to Prescribing Gluten-free Products.
- Reinforce the need to confirm the diagnosis of coeliac disease or dermatitis herpetiformis by a specialist medical team, prior to initiating prescribing of gluten-free products.
- To support a continued reduction in the prescribing of gluten-free items which are non-staple, described in the All Wales guideline as “luxury items”.
- To continue to monitor the prescribing of gluten-free cereal products and porridge oats.
- Explore drug tariff prices for gluten-free products. The cost of a specified brand of a gluten-free product can be considerably higher on NHS prescription than the same product purchased from a supermarket.
- Promote awareness amongst patients of the greater range of gluten-free products available in the supermarket.
- Consideration of alternative NHS provision of gluten free products, removing the need for GPs to prescribe.

## SUMMARY

- This document reviews the prescribing of gluten free products in Wales, with reference to the updated All Wales Guide to Prescribing Gluten-Free Products. This is available on the [AWMSG website](#)<sup>1</sup>.
- NHS Wales' expenditure for prescribing of gluten-free products in primary care was £1,969,775 (131,308 items) for the period April 2012-March 2013. This is a reduction of 3.7% on the same period the previous year.
- The prescribing of "luxury" items has decreased significantly; cake mixes have reduced from 779 items in the quarter ending June 2010 to 18 in the quarter ending March 2013, bakery products have reduced from 37 items to 12 items, and chocolate biscuits have reduced from 1,168 items to 567 items over the same period.
- The majority of the expenditure (£1,314,153) was for gluten-free bread products (69,002 items); this accounted for 66.7% of total expenditure and 52.6% of total items.
- During 2012, ACBS approval was given for prescribing gluten-free cereals and prescribing is increasing. The cereal product recommended for prescribing in Wales made up 26% (£3,196) of total cereal prescribing. The cereal products listed for use in exceptional circumstances, and on clinical advice is 68% (£9,764) of total cereal prescribing. This is an area which will require ongoing monitoring.
- There is now a wide range of gluten-free foods readily available from major supermarkets both in store and online. However gluten-free items cost significantly more than their gluten-containing equivalent.
- The cost of a named gluten-free product can be significantly higher on NHS prescription than from a supermarket.
- Health boards and prescribers should ensure
  - All patients prescribed gluten-free products have a confirmed diagnosis of coeliac disease or dermatitis herpetiformis
  - All patients with coeliac disease and dermatitis herpetiformis receive an annual review which includes a review of product choice and quantity. Unused products should be deleted from the patient's repeat prescription.
- Community pharmacists should check the expiry date of fresh bread products when it is delivered to the pharmacy and advise patients on appropriate storage arrangements.

## 1.0 INTRODUCTION

Guidance produced by the Wales Dietetic Leadership Advisory Group was endorsed by the All Wales Prescribing Advisory Group (AWPAG) and circulated nationally in October 2011. Aspects of the guidance were piloted in Abertawe Bro Morgannwg University (ABMU) and Cardiff and Vale University Health Boards. In February 2013, the All Wales Medicines Strategy Group (AWMSG) endorsed the updated All Wales Guide to Prescribing Gluten-Free Products. This is available on the [AWMSG website](#)<sup>1</sup>.

Coeliac disease prevalence in the UK is estimated at 1.22% in adults and 1.08% in children. In Wales, the actual prevalence is between 1.18% and 1.19%, with no significant variation between the Welsh regions<sup>3</sup>.

This document reviews the prescribing of gluten-free products in Wales, focusing on prescribing in line with the recommendations made within All Wales Guide to Prescribing Gluten-Free Products. The prescribing data within this analysis is taken from the Comparative Analysis System for Prescribing Audit (CASPA)<sup>2</sup>.

## 2.0 OVERVIEW OF GLUTEN-FREE PRESCRIBING

Total NHS Wales expenditure in primary care was £1,969,775 (131,308 items) for the period April 2012–March 2013. This is reduction of 3.7% on the same period the previous year. Table 1 shows the breakdown of products prescribed.

**Table 1. Breakdown of products prescribed April 2012–March 2013**

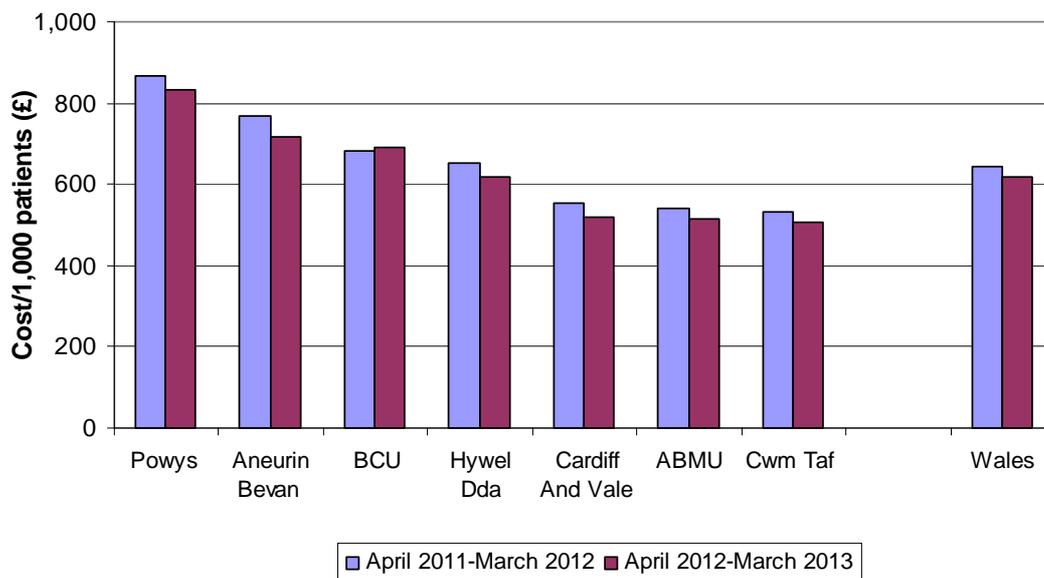
| Product              | Expenditure (£) | Percentage of total expenditure | Items  | Percentage of total items |
|----------------------|-----------------|---------------------------------|--------|---------------------------|
| Bread                | 1,314,153       | 66.7                            | 69,002 | 52.6                      |
| Mixes                | 327,759         | 16.6                            | 17,863 | 13.6                      |
| Pasta                | 181,305         | 9.2                             | 19,884 | 15.1                      |
| Sweet biscuits       | 69,716          | 3.5                             | 11,691 | 8.9                       |
| Crackers/crispbreads | 62,918          | 3.2                             | 9,965  | 7.6                       |
| Cereal               | 13,661          | 0.7                             | 2,846  | 2.2                       |
| Bakery               | 264             | 0.01                            | 57     | 0.04                      |

- Bread products: These include sliced and unsliced loaves, rolls, bread sticks, pizza bases and speciality breads, such as pitta, naan and flat breads.
- Bread products and pasta prescribing has remained relatively static both in terms of cost and items.
- Mixes: These include flour, bread, pastry, cake, gravy, custard and pancake mix. There has been an 8.4% reduction in expenditure on gluten-free mixes for April 2012–March 2013 compared to the same period the previous year.
- Sweet biscuits: Total expenditure on sweet biscuit products has fallen by 42% for April 2012–March 2013 compared to the same period the previous year.
- Crackers and crispbreads: Total expenditure on crackers and crispbreads has fallen by 8.6% for April 2012–March 2013 compared to the same period the previous year.

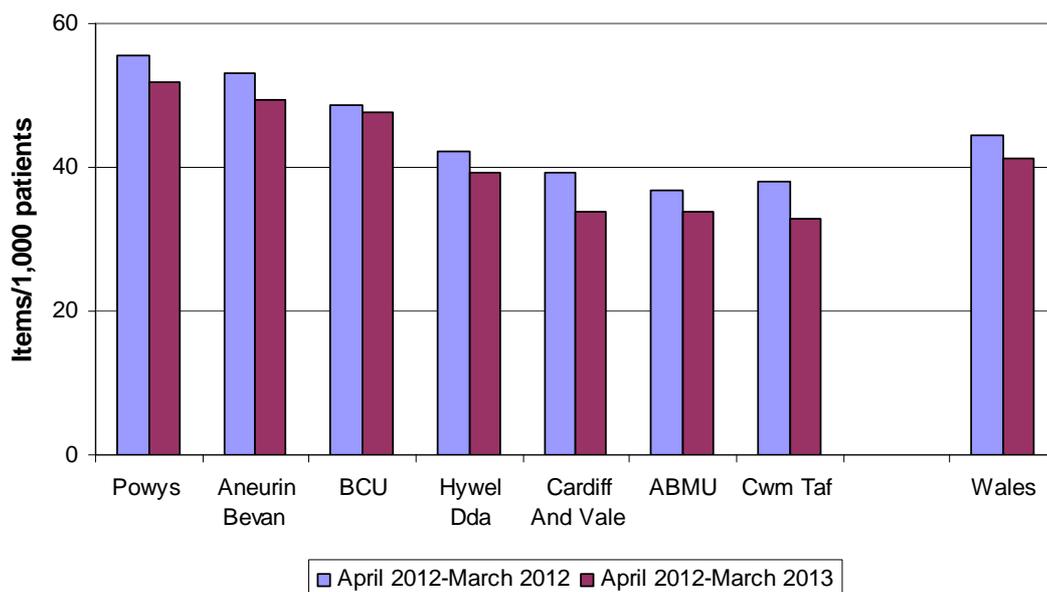
- Cereals: These include fibre products, oat products and other breakfast cereals. Expenditure has increased significantly from £1,548 for the year April 2011–March 2012 to £13,661 for the year April 2012–March 2013.
- Bakery products: These include pastries, cakes, pasties and cake bars. Total expenditure on bakery products in April 2012–March 2013 fell by 73% compared with the previous year.

Figures 1 and 2 show total cost and items per 1,000 patients for each health board compared to the Wales average. Both expenditure and items have reduced in all health boards, with the exception of Betsi Cadwaladr University (BCU) Health Board where there has been a marginal cost increase despite a reduction in items.

**Figure 1. Gluten-free prescribing (cost per 1,000 patients)**



**Figure 2. Gluten-free prescribing (items per 1,000 patients)**



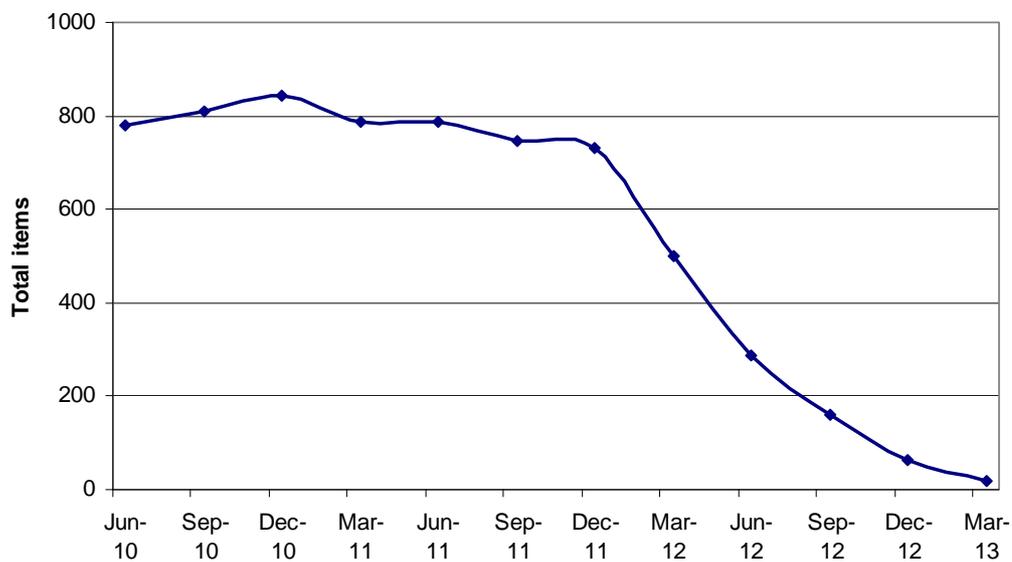
### 3.0 TRENDS IN USE OF SPECIFIC GLUTEN-FREE PRODUCTS

#### 3.1 “Luxury” gluten-free items

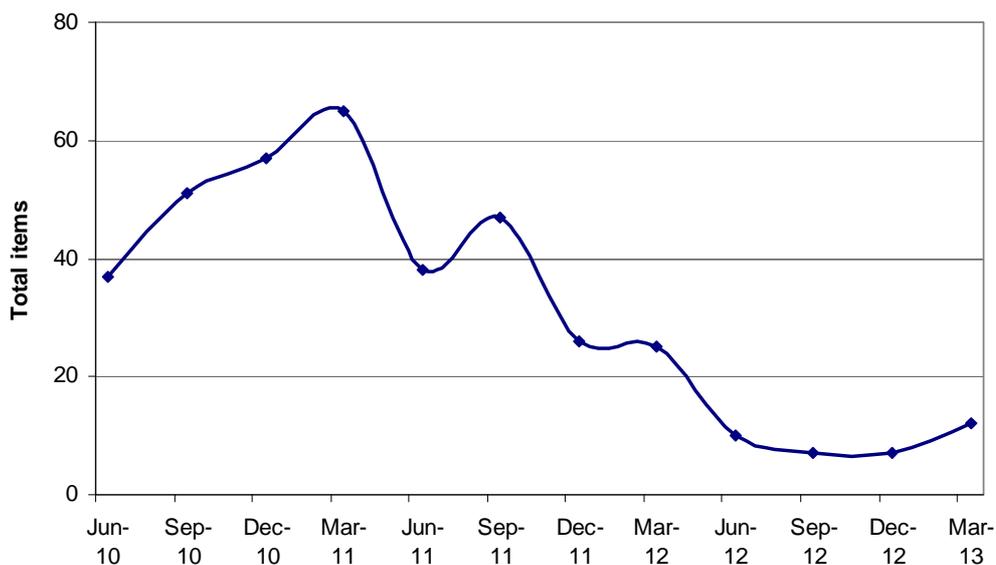
The All Wales guideline states that cake mixes and luxury items such as bakery products and chocolate biscuits should not be prescribed. Figures 3 and 4 show the trend in prescribing of cake mixes and bakery products, respectively. Both graphs show that the prescribing of these products has reduced significantly since the introduction of the draft guidance in October 2011.

Total expenditure on cake mixes reduced by 81%: from £29,414 for the period April 2011–March 2012 to £5,667 for the period April 2012–March 2013. Expenditure on bakery products reduced by 73%: from £977 to £264 over the same period.

**Figure 3. Trend in cake mix prescribing over time**



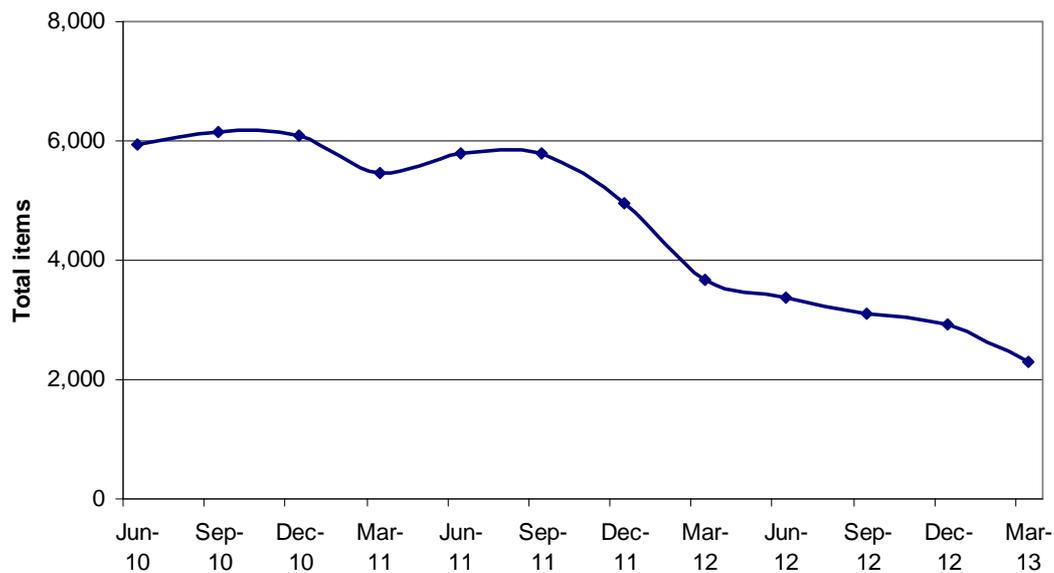
**Figure 4. Trend in bakery item prescribing over time**



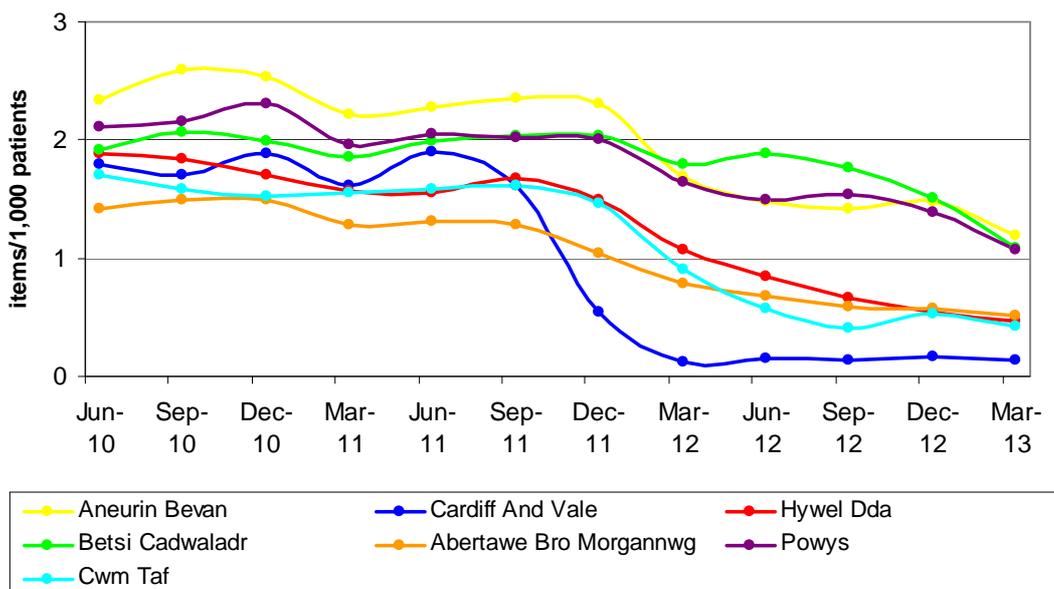
The All Wales guideline states that luxury items such as chocolate biscuits should not be prescribed; however, the guideline provides a list of 12 non-fibre containing biscuits, which may be prescribed in exceptional circumstances.

Figure 5 shows the reduction in prescribing of all sweet biscuits. There was a 42% reduction in both items and spend between April 2011–March 2012 and April 2012–March 2013, whilst there was a 45% reduction in spend on chocolate biscuits over the same period. Figure 6 shows this reduction by health board. Table 6 shows a significant reduction in all areas of sweet biscuit prescribing; representing a saving of £51,471 for the year.

**Figure 5: Trend in sweet biscuit prescribing over time**



**Figure 6: Trend in sweet biscuit prescribing by health board**



**Table 6: Expenditure breakdown of sweet biscuit prescribing**

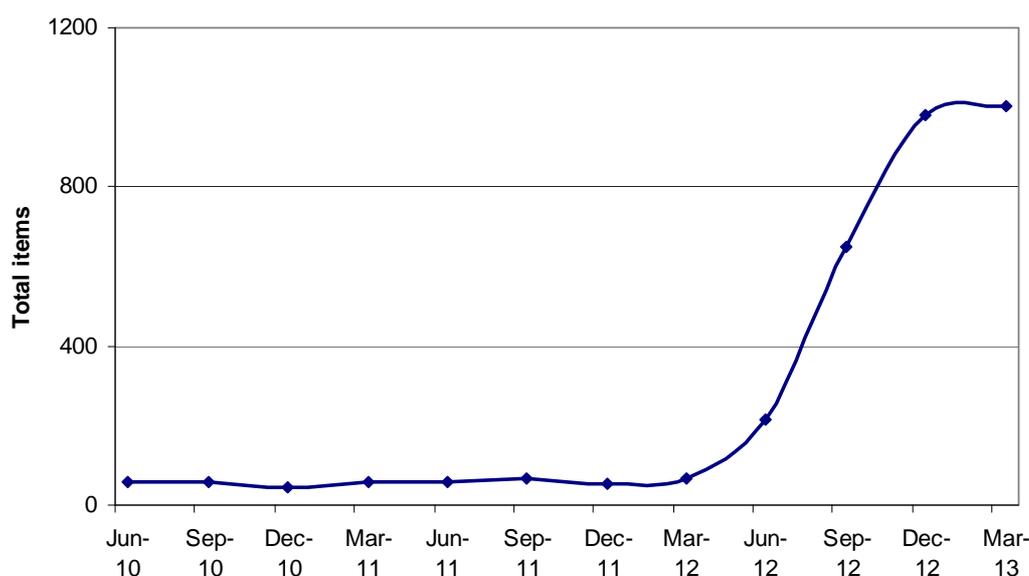
|  | April 2011–March 2012<br>Expenditure (£) | April 2012–March 2013<br>Expenditure (£) |
|--|--|--|
| Total spend  | 121,187                                  | 69,716                                   |
| Biscuits classed in the guideline as suitable for prescribing in exceptional circumstances | 107,802                                  | 62,333                                   |
| Other plain biscuits not listed in guideline   | 681                                      | 266                                      |
| Chocolate biscuits   | 10,736                                   | 5,955                                    |
| Other biscuits which could be classed as luxury biscuits (e.g. cookies)                    | 1,969                                    | 1,197                                    |

### 3.2 Gluten-free cereals

Figure 7 shows the increase in cereal prescribing from April 2010. Total expenditure on gluten-free cereal was £13,661 for the period April 2012–March 2013, compared to £1,548 the previous year; this is an increase of 782%. During 2012, the Advisory Committee on Borderline Substances (ACBS) approval was given for prescribing gluten-free cereals, and this is a likely cause for the sharp increase. There was also an increase in the number of products available.

The only cereal product recommended for prescribing in Wales is Juvela<sup>®</sup> gluten-free fibre flakes, which made up 26% (£3,196) of total cereal prescribing. There are also three cereal products listed for use in exceptional circumstances, and on clinical advice, these include porridge oats and Juvela<sup>®</sup> gluten-free special flakes, which make up a further 68% (£9,764) of total cereal prescribing. This is an area which will require ongoing monitoring.

**Figure 7. Trend in Gluten-free cereal prescribing over time**



The majority of oats and oats products available on the market are contaminated with wheat, rye and/or barley. Processing, such as milling, makes them unsuitable for people with coeliac disease. Some people with coeliac disease also react to pure

uncontaminated oats. The British Society of gastroenterology recommends that it may be helpful to exclude oats for the first 6-12 months of a gluten-free diet before re-introduction. The All Wales guideline includes porridge oats which are guaranteed to be uncontaminated, and can be prescribed on clinical advice.

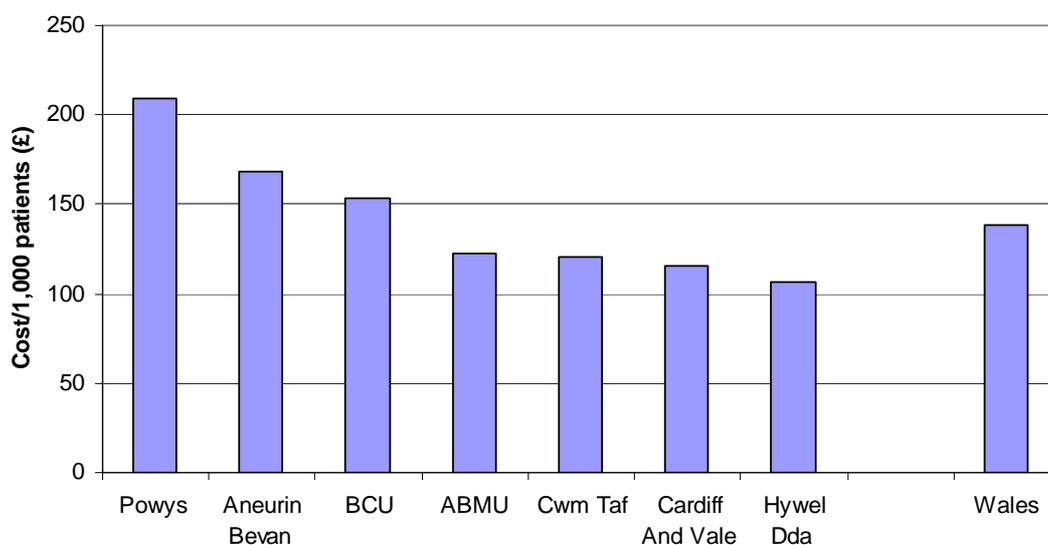
### 3.3 Gluten-free fresh bread

Prescribing of gluten-free fresh bread items cost NHS Wales £441,370 in the period April 2012–March 2013. A range of fresh bread products are included within the All Wales guideline. Figure 8 shows prescribing of fresh bread by health board.

Fresh bread costs per item can seem disproportionately high due to a usual minimum order of eight loaves. Each fresh bread item costs the NHS on average £27.15 (£3.39 per loaf). Fresh bread orders also incur handling and delivery charges, although these are not included within the data from CASPA.

Fresh bread has a usual shelf-life of eight days and can be frozen; therefore bulk buying for patients is recommended as long as dates are checked upon arrival at the pharmacy and manufacturers' instructions are followed, with advice given to patients regarding storage.

**Figure 8. Fresh bread expenditure by health board compared to the Wales average April 2012–March 2013**



## 4.0 ACCESSIBILITY AND COST OF GLUTEN-FREE PRODUCTS WITHOUT PRESCRIPTION

Table 2 shows the differences in cost between gluten-free products on prescription and those available “off the shelf” in supermarkets.

**Table 2. Cost comparison of gluten-free products on prescription and from supermarkets**

| Product                       | Price of gluten-free food to NHS on prescription <sup>4</sup> | Supermarket price <sup>5-8</sup> | Gluten-containing equivalent* |
|-------------------------------|---|----------------------------------|-------------------------------|
| Loaf of bread (400–500 g)     | £2.59–£5.36   | £1.99–£3.00                      | 50p                           |
| Pasta (500 g)                 | £2.72–£6.51   | £1.40–£2.18                      | 30p                           |
| Biscuits (200 g)              | £2.00–£3.88   | £1.15–£1.95                      | 75p                           |
| Flour (500 g)                 | £3.10–£6.64   | 85p (£1.70/1,000 g)              | 40p                           |
| Cake/pastry/bread mix (500 g) | £3.10–£6.24   | £1.99 (£4.78/500 g)              | 22p (£1.10/500 g)             |
| Cereal                        | £3.59 (£1.20/100 g)   | £2.79 (74.4p/100 g)              | 31p/500 g (6.2p/100 g)        |
| Pizza base (each)             | £1.33–£4.48   | £1.00                            | 75p                           |

\* Gluten-containing equivalent relates to the equivalent product which is not labelled as gluten-free and may contain more than 20 parts per million of gluten protein.

Points to note:

- A wide range of gluten-free foods are readily available from all the major supermarkets both in store and online. When gluten-free food first became available on NHS prescription, the range of products readily available from supermarkets was very limited; this is no longer the case. However in small towns and rural areas availability can be limited and supermarkets do not produce ‘budget’ lines of gluten free products.
- Gluten-free items can cost significantly more than their gluten-containing equivalent for the patient to buy from a supermarket.
- The per-item cost of a gluten-free product can be significantly higher on NHS prescription than from a supermarket.
  - For example, Dietary Specials<sup>®</sup> gluten-free multigrain sliced loaf (400 g) costs £3.10 on an NHS prescription<sup>4</sup>, compared to £2.19 from a supermarket<sup>8</sup>. Dietary Specials<sup>®</sup> gluten-free fusilli pasta (500 g) costs £3.54 on an NHS prescription<sup>4</sup>, compared to £1.70 from a supermarket<sup>6</sup>.
- Products only available through pharmacies with an NHS prescription, for example Juvela<sup>®</sup>, Barkat<sup>®</sup> and Glutafin<sup>®</sup>, cost more than the equivalent high street products.
- NHS gluten-free prescriptions should only be used for an individual with a confirmed diagnosis of coeliac disease; quantities should be based on their individual nutritional requirements. When families wish to use gluten-free products, for example flour, to prepare meals for the whole family, it is appropriate to use supermarket products.
- Health boards and prescribers should ensure that all patients prescribed gluten-free products have a diagnosis of coeliac disease or dermatitis herpetiformis by specialist medical team or dietician.

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