Contents

Introduction

Product and Company

This report aims to advise one of the UK's sports nutrition market leader, MaxiNutrition, to make improvements to its existing Chocolate Caramel Protein Bar, as pictured in Figure 1. With sports nutrition products only being used by professional athletes and body builders until recently, these products have become increasingly appealing to a wider audience, including women and 'lifestyle users'. 'Lifestyle users' are defined as those who purchase nutritional protein products as part of a healthy lifestyle, and who Heller (2010) holds responsible for the recent boom in the sports nutrition market (Heller, 2010).

Acquired by GlaxoSmithKline in 2010 for £162 million (Heller, 2010; GSK 2015), MaxiNutrition has seen increased distribution and innovation, resulting in significant sales increases and was valued at £260 million in 2012 (De Angelis, 2013). The latest figures available indicated that in 2011 MaxiNutrition had 77,000 employees, turnover was £38,331,000 and profit before tax was £1,032,000 (Fame, 2011).

Figure 1. MaxiNutrition's Chocolate Caramel Protein Bar (Boots, 2015a).

Key operations

One of the key operations already in place that adds value to MaxiNutrition's Protein Bar range is the extensive scientific research and innovation that occurs at GSK's Human Performance Lab (GSK, 2015a). This allows for cutting edge scientific findings to lead the way for performance nutrition products, such as the Protein Bar we are looking to add further value to.

Consumer Benefits

Using sports nutritional products such as protein bars currently provides a number of benefits to consumers. The obvious benefit is the nutritional value that protein bars quickly provide. A protein-rich diet is particularly important for athletes and those looking to build muscle mass, as this contributes to increased muscle growth and tone (Tipton & Wolfe, 2001).

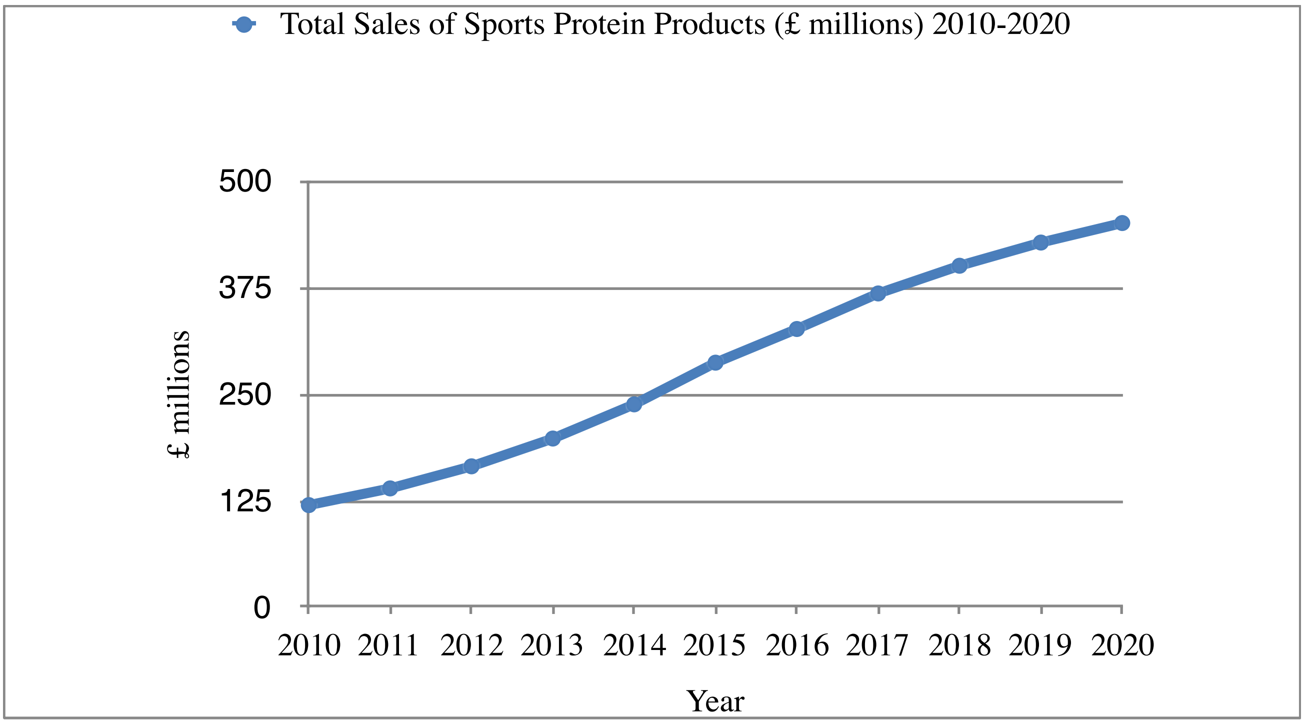
Another benefit is convenience. Not only are these bars ready to eat straight away and provided in single-serving sizes, they are relatively low cost and therefore appeal to the majority of users (Keynote, 2014). Consumers can now purchase protein products at high street chains such as Boots as well as supermarkets and gyms and therefore are easily accessible (Boots, 2015b).

The UK Market

The Sports Nutrition Market

The sports nutrition market has seen substantial growth in recent years, with the total UK market being valued at £417 million in 2015, a staggering 17% increase from 2014 (Euromonitor, 2015a), as illustrated by Figure 2. By 2020 the global sports nutrition market is estimated to grow at a Compound Annual Growth Rate (CAGR) of 8% (Statista, 2014) and sales are forecasted to reach £450.8 million, meaning that innovation of products is essential to make the most out of this growth (Euromonitor, 2015a)

Figure 2. Created from data by Euromonitor, 2015a; Total sales of sports protein products (£ millions) 2010 - 2015 and forecasted sales from 2015-2020.



Segmentation of the Sports Nutrition Market

As depicted by Figure 3, there are three main sectors within the sports nutrition market; powders, protein bars and protein drinks. Specifically protein bars are the second largest sector in the sports nutrition market (Keynote, 2014). In 2015, protein bars alone yielded £81.2 million, which was 28.3% of the total revenue from protein products.

Figure 3. Sales of sports nutrition by category (£million), 2010-2015 (Euromonitor, 2015a).

	2010	**2011**	**2012**	**2013**	**2014**	2015
Powders	84.0	96.1	109.6	123.8	142.6	174.3
Protein Bars	25.8	30.6	39.8	54.2	70.4	81.2
Protein Drinks	10.1	12.7	15.9	20.1	25.0	31.5
Total	**119.9**	**139.5**	**165.4**	**198.0**	**238.1**	287.0

Research by Keynote (2014) outlines two additional sectors of the sports nutrition market not outlined Euromonitor (2015a); capsules and tabets, and gels. Figure 4. displays the sales of these sectors.

Figure 4. The UK market for sports nutrition products by value at current prices (£million at retail selling prices), 2009-2013 (Keynote, 2014).

	2009	**2010**	**2011**	**2012**	**2013**
Capsules and tablets	81.1	86.5	90.3	94.8	100.2
Gels	12.5	14.5	16.5	17.8	19.3
Total	**93.6**	**101**	**106.8**	**112.6**	**119.5**

Main Substitute Products

As illustrated in Figure 6 The Hut Group dominate the sports nutrition market with 20.8% of the market value, with MaxiNutrition following behind with 13.5% of the value in 2015. The 'High Pro' protein bar created by UK based The Hut Groups's MyProtein brand offer a substitute product for MaxiNutrition's Protein Bar, as depicted in Figure 5. This is based on the nutritional value that MyProtein's bar offers, with 30g of protein per 100g compared to MaxiNutrition's 22g. While this doesn't seem too significant, the size of the bar is where consumers are getting much more value for money by purchasing MyProtein's High Pro bar. For a box of 12 MyProtein 80g bars it costs £17.99 compared to 12 of MaxiNutrition's 45g bars for £21.49. Furthering this, MyProtein's High Pro bar offers a low sugar alternative to MaxiNutrition's bar, with the values being 3.5g to 24g respectively. Therefore, consumers are paying over double for MaxiNutrition's product, which has less protein content and significantly more sugar therefore making MyProtein's product a tempting substitute (MyProtein, 2015; MaxiNutrition, 2015b).

Figure 5. The Hut Group's MyProtein 'High Pro Bar', 80g bar (MyProtein, 2015

As we are recommending MaxiNutrition's Protein Bar is aimed towards the health conscious consumer, its important to look at competitors that use natural products. Trek Protein bars (illustrated by Figure 7) are produced by UK company Natural Balance Foods, and set themselves apart from MaxiNutrition's products as they are made from natural ingredients, such as dates, raisins and cashews, and are aimed towards those living an active healthy lifestyle (Natural Balance Foods, 2015a). Their turnover was £22.2 m in 2015, up from £13.3 million in 2014, therefore highlighting the vast growth rate of this organisation (Fame, 2015), and popularity of natural products. These bars are marketed as being 1 of your 5 a day, gluten, wheat and dairy free as well as containing a respectable 18.2g of protein per 100g. These health claims therefore rival MaxiNutrition's bar as it appeals to 'lifestyle users' who have greatly contributed to expenditure of sports nutrition products in recent years (Heller, 2010).

Figure 7. Natural Balance Food's Trek Protein Cocoa Chaos Bar 55g (Natural Balance Foods, 2015b).

Figure 6. National Brand Owner (NBO) Company Shares of Sports Nutrition: % Value 2011-2015 (Euromonitor, 2015a)

% Retail value rsp	**2011**	**2012**	**2013**	**2014**	**2015**
Hut Group Ltd, the	8.1	9.8	10.4	13.8	20.8
MaxiNutrition Ltd	36.5	32.5	22.5	17.7	13.5
Holland & barrett Retail Ltd	14.7	14.7	14.3	13.2	11.9
PhD Nutrition Ltd	6.5	6.1	6.1	5.9	5.2
Sports Supplements Ltd	-	0.5	1.3	3.2	4.1
Reflex Nutrition Ltd	4.2	4.3	4.2	4.2	4.1
Sci-Mx Nutrition LLp	4.5	4.4	4.4	4.2	4.0
USN UK Ltd	4.6	4.6	3.8	3.5	4.0
SiS (Science in Sport) Ltd	-	0.6	1.2	2.2	3.3
CNP Professional Ltd	3.9	3.8	3.4	3.0	2.6
Glanbia Plc	-	1.1	1.7	2.2	2.1
My Goodness Ltd	0.6	1.0	1.4	2.1	1.9
Grenade (UK) Ltd	-	-	1.6	1.8	1.7
Protein World Ltd	-	-	0.3	0.9	1.4
Protein Works Ltd	-	-	-	0.5	1.2
Natrol UK Ltd	2.3	1.9	1.5	1.0	0.6
Cytosport Inc	-	-	-	0.1	0.6
EAS UK	2.9	1.9	1.1	0.7	0.3
Maximuscle Ltd	-	-	-	-	-
MyProtein Inc	-	-	-	-	-
Others	11.1	12.8	20.8	19.7	16.5
Total	100.0	100.0	100.0	100.0	100.0

Trends

Changing Attitudes Towards Sports Nutrition Products

Up until recent years, sports nutrition products were only considered necessary for serious athletes and bodybuilders. However, this attitude has changed significantly and now protein-rich products are considered useful for weightloss and are enjoyed by many as part of a healthy lifestyle (Euromonitor, 2015a; Heller, 2010). As well as 'lifestyle users', there are three other main consumers of sports nutrition products; bodybuilders, athletes and recreational users (for whom sport is a hobby).

Increase in Female Consumers

Through the use of social media and bloggers, female consumers of sports protein products have significantly increased, consequently contributing the the growth of the sports nutrition market (Euromonitor, 2015a). An example would be lifestyle blog by 'Deliciously Ella' who regularly writes about protein rich foods (Deliciously Ella, 2014). Attitudes about weight loss have changed from meal-replacement products to a protein-rich diet and active lifestyle. This has led to 37 % of women age 16-34 currently purchasing sports nutrition products, however men in this age drive the market with 54% purchasing (Mintel, 2015f).

External Environment

The Price of Protein Rich Raw Ingredients

The use of plant proteins, particularly soy proteins, have increased significantly in sports nutrition products, as in their most refined form they can contain up to 90% protein (FAO, n.d.). The gradual decrease in price of soybeans has made them even more appealing to manufacturers; from $623 in August 2012, to $327 in October 2015 (Indexmundi, 2015b), as indicated by Figure 8. Their price is set to very gradually increase to $405 per ton in 2019, however this change will not have too much of an impact on MaxiNutrition (Knoema, 2015a). Similarly, the price of protein-rich peanuts has been steadily decreasing from $2,850 per metric ton in March 2013 to $1820 in October 2015 (Indexmundi, 2015a). Brown rice is a consistently low cost ingredient, and provides a rich source of protein which is becoming increasingly popular in the sports nutrition industry. In October 2015 was valued at $360.45 per metric ton (Indexmundi, 2015c). These drops in prices of these three protein-rich ingredients are set to remain consistently low in the coming four years (Knoema, 2015a, 2015b), therefore impacting the expenditure on raw ingredients for protein bars.

Figure 8. Price change of raw ingredients and future price forecasts. Created from data by Indexmundi, 2015a, 2015b, 2015c; Knoema, 2015a; 2015b).

	Previous Price	Current Price October 2015	Future prediction of price (2019)
Soybeans	622.91 (August 2012)	319.08	405.0
Rice	612.43 (May 2012)	360.45	400.0
Peanuts	2850 (March 2013)	1820	-
Cocoa	3470 (February 2011)	3280	-

Changes in the global milk industry has caused the price of dairy based proteins to increase (i.e. whey protein) (De Angelis, 2013), therefore we can predict this will impact on MaxiNutrition's Chocolate Caramel Protein Bar which contains a significant amount of whey protein. This is due to the slowing of milk production in the five key exporting areas of the EU, US, New Zealand, Australia and Argentina (Forde, 2015). Therefore, prices at the Global Dairy Trade auction increasing by 3.5% since the start of October 2015 (Morgan, 2015), leading to the consumer having to pay more for the final product (Muscle & Fitness, 2015).

Increasingly Health Conscious Culture

Research shows that in 2014, 11 million people in the UK were taking part in 8 or more moderate intensity exercise sessions a month, which is more than any other year studied from 2009 (Keynote 2014). Furthermore, there has been a 1.3% increase in annual growth of the UK's gym and fitness centres industry between 2011-2016 (IbisWorld, 2015). With increased exercise comes increased expenditure on sports nutrition products, with 75% of buyers exercising more than once a week (Mintel, 2015b). A large contributory factor for this increase in physical activity is the legacy left by the London 2012 Olympic Games and Glasgow Commonwealth Games in 2014 (Gov, 2012; Euromonitor, 2012). We can only assume that this trend will persist, as Figure 9. illustrates the number of adults participating in physical activity has been steadily increasing, therefore predicting that more people will buy into sports nutrition products to complement their increasingly active lifestyles.

Figure 9. Participation in keep fit, gym activities and running, 2011-2015 (Mintel, 2015i).

	Number of UK adults participating in 'keep fit and gym activities'	**% of total adult population**	**Number of UK adults participating in running**	**% of total adult population**
2011-2012	6,310,500	14.7	1,961,700	4.6
2012-2013	6,620,100	15.3	1,945,700	4.5
2013-2014	6,712,800	15.4	2,083,100	4.8
2014-2015	6,559,500	15.0	2,146,100	4.9

The desire to eat 'clean label products' - the use of natural, vegan, vegetarian, dairy free ingredients - is increasingly important to consumers in the UK (Keynote, 2014), with 44% keen to try a protein bar that was low in sugar and calories, no added flavourings and containing 'superfoods' (Mintel, 2015d). Consumers attitudes towards dairy products have also changed over recent years, with more now perceiving dairy-free alternatives, such as nut based products, as healthier for developing a balanced diet (Keynote, 2015).

<u>Economic Forecasts</u>

With the UK economy in recovery, consumers have more disposable income to spend on non-essential products such as sports nutrition items as well as fitness related activities such as gym memberships. It is predicted that this expenditure will continue in the next 5 years (Mintel, 2015e). As demonstrated by Figure 10. the UK population is set to increase from 64,938,000 in 2015 to 66,266,000 in 2018 therefore creating a larger potential consumer base and increased demand. Similarly, the combination of increased inflation and lower unemployment means that households will have more disposable income to spend on sports nutrition products in the coming years (Keynote, 2014). There is a positive correlation between increased household incomes and the numbers of adults exercising to the UK government guidelines increased, with 76% of men and 63% of women in the highest income quartile compared to 55% of men and 47% of women in the lowest (HSCIC, 2014). Therefore, economic trends are set to have an impact on household incomes, which in turn impacts levels of physical activity and expenditure on sports nutrition products.

Figure 10. Economic forecasts (000, % and million), 2014-2018 (Keynote, 2014).

	2014	2015	2016	2017	2018
UK resident population (000)	64,511	64,938	65,386	65,825	66,266
GDP growth (%)	2.9	2.5	2.4	2.4	2.4
Inflation (%)	2.5	3.1	3.3	3.3	3.4
Unemployment (million)	1.19	1.07	1.05	1.02	1.01

Technological Developments

Changing the Manufacturing Process

Essentially for this modified protein bar, MaxiNutrition will need to source new suppliers of natural ingredients. These will include cashews, peanuts and brown rice protein, whilst purchasing soy protein from the same supplier. Utilising new ingredients, such as brown rice protein, will involve a whole new manufacturing process. In order to attain the protein from brown rice in powder form, the protein can be enzymatically extracted from multiple laters of the whole grain or hexane-extracted from the bran layer of the rice. The concentration of protein can be altered in a range between 70% and 90% (Axiomfoods, 2015). Rice protein will replace the whey protein currently in the Chocolate Caramel bar, therefore making the protein source a blend of brown rice protein and soy isolate. The fact that we can achieve up to 90% protein with the brown rice protein, means we will increase the total protein content of the bar from 10g to 15g per 45g bar. This process would be outsourced to a specialist manufacturer, who would provide us with the powder form in order to create the protein bars.

In terms of the composition of the new protein bars, initially MaxiNutrition would outsource the manufacturing process to an external company who specialises in handling natural products. For example, France based Balarama who are specialists in the manufacturing of natural and health bars (Balarama, 2015). This would be for a trial period, and depending on the success of the product MaxiNutrition will amend their current factory to be able to accommodate production of this renewed bar.

Development of Environmentally Friendly Packaging

This new protein bar will ensuring it is produced in an environmentally friendly way, and is recyclable will appeal to consumers. Over half of consumers feel strongly that food items should not be sold in non-recyclable packaging (Mintel, 2010). Attitudes to health and the environment are undoubtedly linked, and therefore as we are re-branding this protein bar for health conscious users, the marketing and packaging should have environmental benefits too (Department of Environment, Nature and Energy, 2015).

Online Self-Service

The Protein Works have implemented an innovative 'create your own' section to their website, meaning customers choose the protein type, carbohydrates and flavours from an extensive list (The Protein Works, 2015). This empowers the consumer to create a protein bar entirely tailored to their needs. This concept could be applied to our proposal for MaxiNutrition by updating the website with this individualised service, however using natural ingredients rather than highly processed options The Protein Works offers. Technology at the processing plants will have to be adapted to accommodate for these small individual orders, as well as mass-production which will remain the overarching process. Offering this personalised service will increase consumer loyalty to MaxiNutrition, and increase revenue in the long run (Mintel, 2015c).

Improvement Recommendations

Customer Experience

We will conclude this report by drawing on all the evidence presented and making recommendations to improve MaxiNutrition's Chocolate Caramel Protein Bar. The overarching change we will make to this product is by marketing it differently to reach out to 'lifestyle users' as well as regular gym goers and athletes. This will be achieved through three methods; changing the ingredients and protein quantity, updating the website facilities and the rebranding packaging and marketing.

In terms of the way the customer experiences this new product, it will be stocked in stores that already hold MaxiNutrition products such as Boots and Holland and Barrett and will be displayed in a point-of-sale stand to attract optimal attention (Holland and Barrett, 2015; Boots, 2015a), as illustrated in Figure 11. We will also pitch to supermarket retailers, as this is the most likely way that consumers will purchase this product, with 40% of physical purchases made from this kind of retail (Mintel, 2015b).

In terms of measuring customer satisfaction and feedback, a trial period lasting a month will take place involving 500 volunteers who are a mix of athletes, gym goers and 'life-style users'. Following this a focus group will be held where all aspects of the new product will be discussed; the packaging, flavour, nutritional value and price. The feedback will be taken on board and the changes made to the product if need be.

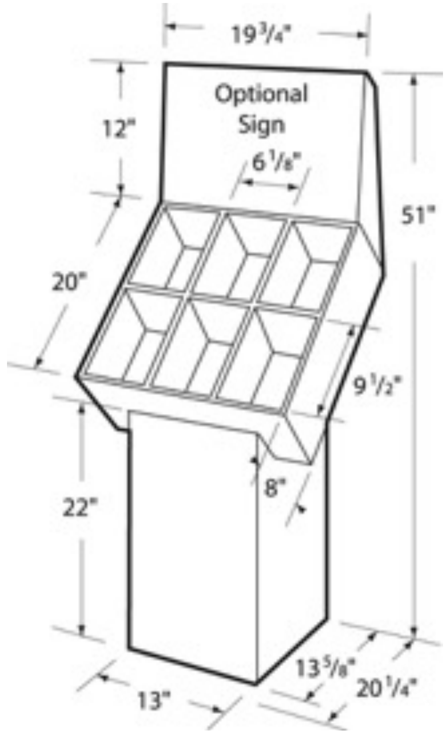


Figure 11. Design of point of sale stand (Alibaba, 2015).

Improvement Recommendation	Expected Benefit
A) Changing the ingredients of the MaxiNutrition Protein Bar to be made up of natural ingredients. We will be maintaining the chocolate flavour as 43% of people would be interested in trying a high-protein snack bar that was similar to their favourite chocolate (Mintel 2015h). A unique selling point of the original Chocolate Caramel Protein Bar was the great flavour, however this came at a cost of less nutritional value. Therefore the new protein bar will incorporate a great taste through natural ingredients and a high protein content. The use of peanuts, cashews, dates and coco will give a sweet, chocolaty hit as well as chewy texture. Milk protein concentrate will be removed due to the recent dramatic price increases in milk (Forde, 2015).	1) Widening the customer base as the product will appeal to lifestyle users who will incorporate protein bars into their diet due to more natural ingredients (Heller, 2010; Mintel 2015d) 2) Better nutritional value compared to original Chocolate Caramel Protein Bar. 3) Different but appealing taste and texture. 4) Dairy-free - which is a factor that is increasingly appealing to consumers (Keynote, 2015).

B) Increasing the protein content from 10g per 45g bar to 15g Currently the main source of protein in MaxiNutrition's bar is a blend of soy protein isolate and milk protein concentrate (MaxiNutrition, 2015c). Although these sources of protein come from soybeans and milk respectively, they have been refined excessively and therefore are not considered natural to consumers. As evidenced by the research consumers perceive naturally occurring proteins as better for us, with 26% of adults holding this view (Mintel, 2015g). Therefore, the new protein bars will be made up of a blend of brown rice protein and soy protein, both of which can have a protein content of 90%. (Soya, 2015; Axiom Foods, 2015). This high protein content means the total protein of the bar will increase from 10g to 15g per 45g bar. The price of soybeans has been steadily falling since 2012, therefore justifying in their use (Indexmundi, 2015b).	1) Nutritional value increased and fulfilling the purpose of a protein bar, which is to contribute to fat loss and muscle tone (Clark, 2015). 2) Removing 'added protein' and replacing it with natural sources, such as brown-rice protein, will make the product appealing to a wider range of customers. 3) A higher content of protein will rival substitute products such as MyProtein's 'High Pro' bar which currently offers 30g of protein per 100g compared to MaxiNutrition's 22g (MyProtein, 2015; MaxiNutrition, 2015).

C) 'Create-your-own' online facility Consumers will have the option to create their own protein bar with a selected list of natural ingredients. They will select a protein type (from soy, peanut or brown rice) and flavourings (dates, honey, freeze-dried berries) The website will have an easy-to-use facility that explains all the ingredients on offer, and gives nutritional values for the bar they have created. Customers will have to create an free account, and will opt-in to receiving promotional deals relevant to their online purchases. The manufacturing process will need to be adapted to accommodate these small personal orders, as well as maintaining large production levels of the Chocolate Protein Bar which will be the main product.	1) Gives customers the opportunity to make products personalised to their needs. 2) Easy and convenient online service. 3) Increased numbers of subscribed customers through online sign ups, therefore an opportunity to promote new and relevant products. 4) Creating consumer loyalty and increased revenue in the long run (Mintel, 2015c). 5) This service will rival that of The Protein Works, with a view to convert customers to MaxiNutrition (The Protein Works, 2015).

D) Changing the marketing of the product towards the everyday 'lifestyle user', and towards both genders rather than being biased towards men. 'Lifestyle users' have contributed the most to the growth of the sports nutrition industry over the last five years (Heller, 2010), therefore marketing the product to this group will be lucrative. Wording such as 'new natural recipe', 'dairy free' and 'over 15g of protein' will feature on the packaging and highlight the significant changes made to the product, therefore replicating the 'clean-label product' that 'lifestyle users' look for in a sports product brand (Keynote, 2015; Development of eco-friendly, recyclable packaging will reflect that this product provides nutrition but also does good for the environment (Mintel, 2010). With sports nutrition products being greatly biased towards men (Euromonitor, 2015), the packaging will be neutral in presentation, containing earthy colours to reflect the natural elements. Currently, MaxiNutrition's home page of the website only features men using their products (MaxiNutrition, 2015), therefore we will upload images of women, indicating that the new product is suitable for both genders.	1) Changing public perception of this MaxiNutrition product as a lifestyle product and not specificly for keen sports goers. However, gym-goers and atheletes will not be alienated from the marketing. 2) Recyclable packaging means the consumer feels the benefits of all aspects of the product. 3) Removing the gender bias prevents women from being alienated, therefore increasing the potential for sales. 4) With 71% of consumers purchasing protein products online, the changes to the website will encourage increased sales (Mintel, 2015b),

References

Alibaba. (2015). *New design point of sale cardboard stand mock up*. Available at: http://www.alibaba.com/product-detail/new-design-point-of-sale-cardboard_60296784061.html (Accessed: 12 December 2015).

Axiom Foods. (2015). *Plant Proteins: Oryzatein brown rice protein powder.* Available at: http://axiomfoods.com/product_details.php?main_cat=3&sub_cat=19&prod_id=28 (Accessed: 10 December 2015).

Balarama. (2015). *About Us*. Available at: http://www.balarama.eu/-About-us-.html?lang=en#tabs-2 (Accessed: 6 December 2015).

Boots. (2015a). *MaxiNutrition Protein Bar Chocolate Caramel - 45g*. Available at: http://www.boots.com/en/MaxiNutrition-Protein-Bar-Chocolate-Caramel-45g_1495176/ (Accessed: 10 October 2015).

Boots. (2015b). *Maxi Nutrition* . Available at: http://www.boots.com/en/MaxiNutrition/ (Accessed: 3 December 2015).

Clark, S. (2015). 'Bar none: 6 things to look for in any protein bar', *Body Building*, 7 April. Available at: http://www.bodybuilding.com/fun/6-top-protein-bar-factors.htm (Accessed: 3 December 2015).

De Angelis, A. (2013). 'UK sports nutrition market led by MaxiNutrition', *Companies and Markets,* 28 August. Available at: https://uk.finance.yahoo.com/news/uk-sports-nutrition-market-led-000000082.html (Accessed: 3 December 2015).

Deliciously Ella. (2014). Products I love: Chia Seeds, *Deliciously Ella,* 27 August. Available at: http://deliciouslyella.com/products-i-love-chia-seeds/ (Accessed: 12 December 2015).

Department of Environment, Nature and Energy. (2015). *Environment and Health*. Available at: http://www.lne.be/en/environment-and-health (Accessed: 4 December 2015).

Eat Natural. (2015). *Eat Natural Fruit and Fibre with coconut, apricots, oats and spelt flakes*. Available at: http://eatnatural.co.uk/bars/fruits-and-fibre-with-coconut-apricots-oats-and-spelt-flakes/ (Accessed: 9 December 2015).

Euromonitor Passport. (2012). *Cashing in on the Olympics: Food and Beverage Industry set for Obesity Disqualification or Health and Wellness Gold?* [Online]. Available at: https://www.portal.euromonitor.com/portal/analysis/tab (Accessed: 12 December 2015).

Euromonitor Passport. (2015a). *Sports Nutrition in the United Kingdom*. [Online]. Available at: http://www.portal.euromonitor.com/portal/analysis/tab (Accessed: 6 December 2015).

Euronomitor Passport. (2015b). *London: The New Mecca for Health Food Lovers*. [Online]. Available at: https://www.portal.euromonitor.com/portal/analysis/tab (Accessed: 12 December 2015).

Fame. (2011). *Fame. Maxinutrition Ltd*. [Online]. Available at: https://fame.bvdinfo.com/version-20151126/Report.serv?_CID=1086&context=3MOFBZAB6ZC7PKV&SeqNr=0 (Accessed: 3 December 2015).

Fame. (2015). *Fame. Natural Balance Foods Ltd*. [Online]. Available at: https://fame.bvdinfo.com/version-20151126/Report.serv?_CID=932&context=3MOFBZAB6ZC7PKV (Accessed 3 December 2015).

FAO. (n.d.). Isolated Soybean Protein (ISP): Agriculture and Consumer Protection. Available at: http://www.fao.org/docrep/t0532e/t0532e07.htm (Accessed: 13 December 2015).

Forde, A. (2015). 'Global milk production has started to slow', *Agriland,* 19 November. [Online]. Available at: http://www.agriland.ie/farming-news/global-milk-production-has-started-to-slow/ (Accessed: 2 December 2015).

Gov.uk. (2012). *Inspiring a generation: A taking part report on the 2012 Olympic and Paralympic Games*. [Online]. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/78316/Taking_Part_Olympic_Report.pdf (Accessed: 3 December 2015).

GSK. (2015a). *The GSK HPL and MaxiNutrition - Leaders in Performance Nutrition*. Available at: http://www.gskhpl.com/nutrition/ (Accessed: 26 November 2015).

GSK. (2015b). *2014 Annual Report*. [Online]. Available at: http://www.gsk.com/media/603031/annual-report-2014.pdf (Accessed: 25 October 2015).

Health and Social Care Information Centre. (2014). Statistics on Obesity, Physical Activity and Diet. [Online]. Available at: http://www.hscic.gov.uk/catalogue/PUB13648/Obes-phys-acti-diet-eng-2014-rep.pdf (Accessed: 14 October 15).

Heller, L. (2010). 'Sports nutrition market driven by non-sporty consumers', *Nutra Ingredients,* 3 June. [Online]. Available at: http://www.nutraingredients.com/Markets-and-Trends/Sports-nutrition-market-driven-by-non-sporty-consumers (Accessed: 20 October 2015).

Holland and Barrett. (2015). *MaxiNutrition*. Available at: http://www.hollandandbarrett.com/info/maxinutrition/ (Accessed: 12 December 2015).

IbisWorld. (2015). *Gym and Fitness Centres in the UK: Market Research Report*. [Online]. Available at: http://www.ibisworld.co.uk/market-research/gyms-fitness-centres.html (Accessed: 20 November 15).

Knoema. (2015a). *Commodity Prices, Forecast 2015-2019: Soybeans (US$/ton)*. Available at: http://knoema.com/wxgcxde/commodity-prices-forecast-2015-2019-charts-and-tables?variable=Soybeans%20(US%24%2Ftonne) (Accessed: 13 December 2015).

Knoema. (2015). *Commodity Price, Forecast 2015-2019: Rice (US$/ton)*. Available at:http://knoema.com/wxgcxde/commodity-prices-forecast-2015-2019-charts-and-tables?variable=Rice%20(US%24%2Ftonne) (Accessed: 13 December 2015).

Indexmundi. (2015a). *Groudnuts (peanuts) Monthly Price – UD Dollars per Metric Ton*. Available at: http://www.indexmundi.com/commodities/?commodity=peanuts (Accessed: 12 December 2015).

Indexmundi. (2015b). *Soybeans Monthly Price – US Dollars per Metric Ton*. Available at: http://www.indexmundi.com/commodities/?commodity=soybeans (Accessed: 12 December 2015).

Indexmundi. (2015c). *Rice Monthly Price - US Dollars per Metric Ton*. Available at: http://www.indexmundi.com/commodities/?commodity=rice&months=60 (Accessed: 13 December 2015).

Keynote. (2015). *Milk and Dairy Products*. [Online]. Available at: https://www.keynote.co.uk/market-report/food/milk-dairy-products?full_report=true (Accessed: 12 December 2015).

Keynote. (2014). *Sports Nutrition*. [Online]. Available at: https://www.keynote.co.uk/market-report/food/sports-nutrition?full_report=true (Accessed : 20 November 2015).

MaxiNutrition. (2015a). *Why Choose MaxiNutrition?* Available at: http://www.maxinutrition.com/our-expertise/our-science/why-maxinutrition (Accessed: 20 October 2015).

MaxiNutrition. (2015b). *MaxiNutrition Protein Bar 12x45g*. Available at: http://shop.maxinutrition.com/maxinutrition/wellbeing/maxinutrition-protein-bar (Accessed: 3 December 2015).

MaxiNutrition. (2015c). *Chocolate Caramel Protein Bar Ingredients*. Available at: http://shop.maxinutrition.com/Downloads/Labels/Protein%20Bar%20-%20Chocolate%20Caramel_162143.pdf (Accessed: 12 December 2015).

Mintel. (2010). *Consumer Food Packaging – UK – January 2010*. [Online]. Available at: http://academic.mintel.com/display/503607/?highlight#hit1 (Accessed: 4 December 2015).

Mintel. (2015a). *The consumer – Factors that prompt purchases of new food products*. [Online]. Available at: http://academic.mintel.com/display/744384/?highlight (Accessed: 5 December 2015).

Mintel. (2015b). *Purchase of Sports Nutrition Products*. [Online]. Available at: http://academic.mintel.com/display/741657/ (Accessed: 24 October 2015).

Mintel. (2015c). *Winning over customers with personalised deals*. [Online]. Available at: http://academic.mintel.com/display/745080/?highlight (Accessed: 9 December 2015).

Mintel. (2015d). *Sports Nutrition Product Enticements*. [Online]. Available at: http://academic.mintel.com/display/741660/?highlight#hit1 (Accessed : 20 November 2015).

Mintel. (2015e). Market Drivers. [Online]. Available at: http://academic.mintel.com/display/741651/ (Accessed: 12 December 2015).

Mintel. (2015f). *Sports Nutrition Product Usage*. [Online]. Available at: http://academic.mintel.com/display/741656/ (Accessed: 2 December 2015).

Mintel. (2015g). *Attitudes towards protein*. [Online]. Available at: http://academic.mintel.com/display/741659/?highlight#hit1 (Accessed : 20 November 2015).

Mintel. (2015h). *The Consumer – Interest in Types of Chocolate Products*. [Online]. Available at: http://academic.mintel.com/display/739661/?highlight#hit1 (Accessed : 20 November 2015).

Mintel. (2015i). *Health and Fitness Clubs – UK – July 2015*. [Online}. Available at: http://academic.mintel.com/display/743358/ (Accessed: 20 November 2015).

Morgan, C. (2015).'Global Dairy Trade prices increase for the first time since early October', *AgriLand,* 1 December. [Online]. Available at: http://www.agriland.ie/farming-news/global-dairy-trade-prices-increase-for-the-first-time-since-early-october/ (Accessed: 2 December 2015).

Muscle & Fitness. (2015). 'The Protein Challenge: Why Whey is Growing More Expensive', *Body Building,* 15 September. Available at: http://www.bodybuilding.com/fun/the-problem-with-protein.html (Accessed: 25 October 2015).

MyProtein. (2015). *Hi Pro*. Available at: http://www.myprotein.com/sports-nutrition/high-pro/10530459.html (Accessed: 2 December 2015).

Natural Balance Foods. (2015a). *Who are Natural Balance Foods*? Available at: https://www.naturalbalancefoods.co.uk/trek-protein-bars/trek-protein-cocoa-chaos-bar (Accessed: 2 December 2015).

Natural Balance Foods. (2015b). *Trek Protein Cocoa Chaos Bar.* Available at: https://www.naturalbalancefoods.co.uk/trek-protein-bars/trek-protein-cocoa-chaos-bar/ (Accessed: 2 December 2015).

Shanahan, C. (2013). [Frost & Sullivan report on] Analysis of the Global Protein Ingredients Market. [Online]. Available at: http://cds.frost.com/p/52719/#!/nts/c?id=9A75-00-12-00-00&hq=protein%20bars (Accessed: 23 November 2015).

Statsia. (2014). Sports nutrition market volume worldwide in 2013 and 2010. [Online]. Available at: http://www.statista.com/statistics/450267/global-sports-nutrition-market-volume/ (Accessed: 2 December 2015).

The Protein Works. (2015). *Create your own – How it works*. Available at: https://www.theproteinworks.com/create-your-own (Accessed: 3 December 2015).

Tipton, K. & Wolfe, R. (2001). 'Exercise, protein metabolism and muscle growth', *International Journal of Sport Nutrition and Exercise Metabolism,*11*,* pp. 109-132. [Online]. Available at: http://www.storre.stir.ac.uk/bitstream/1893/7628/1/896.pdf (Accessed: 3 December 2015).