

KETOGENIC THERAPIES

ONLINE | AUTUMN NEWSLETTER 2023 | EDITION NO. 22

MATTHEWSFRIENDS.ORG

FAREWELL TO OUR FOUNDER

As Emma Williams MBE retires from Matthew's Friends, we say a fond farewell to the lady who, through her own experiences with her son Matthew, founded our charity in 2004.

See inside for more from Emma & the Trustees....



PREPARING FOR THE 8TH GLOBAL SYMPOSIUM ON KETOGENIC THERAPIES!

Since inception of this premier scientific symposium series in 2008, we have been proud to collaborate and facilitate in providing this biennial event – furthering research and education into Ketogenic Therapies for epilepsy & other neurological disorders.

San Diego beckons, for in-person attendance, with the option of virtual attendance also, allowing health professionals around the globe to attend, wherever they may be. A Family Day on 23 September rounds off a week of all things Keto!

See page 4 for details on how Matthew's Friends are supporting UK professionals to attend.



SPECIAL FEATURES INSIDE:

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INTERNATIONAL NEUROLOGICAL KETOGENIC SOCIETY
www.neuroketo.org

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• **NUTRICIA KETO CONFERENCE**
NEWCASTLE JUNE 2023 - PAGE 14



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AND MUCH MORE!



SEE INSIDE FOR NEWS FROM THE GLUT1DS CONFERENCE HOSTED BY PROF JÖRG KLEPPER!



Ketogenic Dietary Therapies
Information • Training • Research • Support
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MatthewsFriendsOrg
#ketokitchen

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FUNDRAISE FOR
MATTHEW'S FRIENDS** ➔

Matthew's Friends are proud to be founding patrons of the International Neurological Ketogenic Society (INKS) together with our sister organisation in the USA, The Charlie Foundation. This society is bringing Ketogenic experts together from all over the world.



**INTERNATIONAL
NEUROLOGICAL
KETOGENIC SOCIETY**
www.neuroketo.org



Medical Ketogenic Diet Support Forum



Matthew's Friends Supporting Patients and Families

ONLINE INTRODUCTORY & INFORMATION FILMS

At your leisure, view films made by the Matthew's Friends Team led by the Chair of our medical board, Professor Helen Cross OBE.

Topics include:

- History of the diet
- Side Effects of the diet
- Different types of diet available
- Recipe and ingredient demonstrations
- The need for medical management
- Family Stories

CLICK TO VIEW FILM ➔



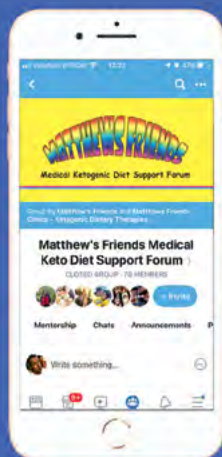
FACEBOOK FAMILY SUPPORT FORUM

Once you or your loved one is on a medically supervised ketogenic dietary therapy, you can gain access to our Facebook support forum by filling out the request form and sending it to us. You will then be invited to join the forum and get to know other families in the same situation as yourself, where you can discuss any problems or concerns you may have or share your successes, recipes and handy hints and tips that makes things work for you.

This is a safe and confidential forum which is moderated by the Matthew's Friends team of past and present Ketogenic Ambassadors and Regional Co-ordinators all of whom have a wealth of experience. Our KetocheFs will also be on hand to answer any food questions for you and from time to time we will have guest professionals join us for specific question and answer sessions on topics that YOU want addressed.

Click the button below for access to the films and the Facebook support forum.

CLICK FOR ACCESS ➔



**Adults with drug-resistant epilepsy, who
have failed TWO or more medications**

**CONSIDER A MEDICAL KETOGENIC
DIETARY THERAPY**

Contact Matthew's Friends at enq@matthewsfriends.org for an information pack.
www.matthewsfriends.org

RETIRING!

After 22 years of the Ketogenic Diet being my life and passion, I decided that it was time that I handed the baton over and retire from Matthew's Friends.

By the time you read this I will have moved away to the country and be living in my dream home with Matthew and my family, several dogs, a hot tub and wine! Although in Matthew's case, it will be fruit cider!

I know that many of you will understand this when I tell you that Matthew is getting older and although his seizure management is as good as ever, his disabilities mean that there are deteriorations in him generally. I don't want to miss any time with him with whatever we may have left, and life is too short to keep putting things off.

I have spent the past 22 years feeling guilty if I am not with Matthew and when I am with Matthew, feeling guilty that I am not doing enough work (typical mum - we are all guilt ridden let's face it). Matthew is enjoying his life and I want to enjoy it with him, my daughter Alice is a qualified doctor and is moving forward with her life and we have her wedding to plan which is very exciting!

I felt that it was time to make a change and leave the team to it. Matthew's Friends has achieved a lot of what I wanted it to do, but unfortunately, I didn't get the 'every person that needs a ketogenic diet should be able to get one' – maybe taking on every health board in the world was a tad ambitious!!!



Emma & Matthew

I am hoping that INKS (International Neurological Ketogenic Society) will take up that particular baton! You are left in safe hands with the Matthew's Friends team, who will carry on the good work and no doubt you will hear more from them in due course.

It has been an honour and a pleasure to serve, and I have LOVED meeting such awesome families over the years. You have been such an inspiration to me.

A huge thank you to all our medical board and international medical advisory board too, thank you for supporting me and Matthew's Friends, especially in the beginning. We wouldn't be where we are today without you. Matthew and I send you all lots of love and wish you all the very best for the future.

Emma & Matthew xx

MOVING FORWARD

A MESSAGE FROM THE TRUSTEES

Matthew's Friend's has always had a small core team right from its very roots, with Emma inspiring us to grow our amazing charity that we are so proud of. We will most definitely continue the good work!

Julie Fountain has been in the background, working alongside Emma. Anyone who knows her will be aware of her dedication to MF for the past 20 years. Her skills in communication, the management of global symposiums and the inspiration behind the development of KetoCollege are exceptional examples of her talents, add to that a sound head for budgeting and we know that we are in safe hands with Julie at the helm as our new CEO.



Emma & Julie

The MF team look forward to working together, alongside our medical board, MF teams abroad and volunteers to keep up the support and education of families and professionals in all things keto.

Much love to Matthew, enjoy time and hugs with Mum. All happiness to Emma with your new family.

SPOTLIGHT ON EDUCATION



Matthew's Friends are Founding Patrons of the newly formed International Neurological Ketogenic Society (INKS) – www.neuroketo.org – a global collaboration of key experts in research and clinical practice of Ketogenic Therapies whose mission is to promote the practice and science of ketogenic diets and related metabolism-based therapies for neurological disorders. This includes providing oversight to the future global symposia series.

As part of our mission to support Education & Research, Matthew's Friends are funding five ketogenic dietitians to attend the **8th Global Symposium in San Diego**.

These places are allocated to members of the Matthew's Friends Medical Advisory Board, as well as via the Ketogenic Dietitians Research Network (KDRN). In the next Newsletter edition, we look forward to sharing their post-event feedback. Facilitating attendance of our keto professionals expands not only their personal experience, but contributes to sharing with peers (via KetoCollege, KDRN etc.) and ultimately benefits the patients and families we all strive to support.



Attending via a Matthew's Friends grant are:

- **Rachel Doody**, Senior Paediatric Dietitian, St George's Hospital
- **Laura Healy**, Clinical Specialist Dietitian, St James' Hospital, Dublin (adult ketogenic service)
- **Jude Munn**, Specialist Dietitian, The Barberry, Birmingham & Solihull Mental Health Foundation Trust (adult ketogenic service)
- **Eva Partridge**, Adult Ketogenic Dietitian, National Hospital for Neurology and Neurosurgery, London
- **Zoe Simpson**, Advanced Clinical Practitioner (ACP) – Dietetic Clinical Lead for Neurosciences, Great Ormond Street Children's Hospital

A number of sponsored virtual attendee registrations have also been allocated, enabling a further eight health professionals to attend and expand their keto knowledge.



8TH GLOBAL SYMPOSIUM ON KETOGENIC THERAPIES

17 - 21 SEPTEMBER 2023
LOEWS CORONADO BAY RESORT

PRESENTED AND SPONSORED BY



IN PARTNERSHIP WITH



PLANT-BASED DIETS ON KETOGENIC DIETARY THERAPY (PBKDT)



WRITTEN BY VAL ALDRIDGE
KETOGENIC FAMILY SUPPORT

In the past few years there has been a huge increase in those following plant-based diets.

[CLICK HERE TO VISIT: HOW MANY VEGETARIANS AND VEGANS ARE IN THE UK? - FINDER UK](#) ➔

It's not just the trend of the last few years. The UK includes a huge diversity in culture and religious beliefs, many of which embrace plant-based diets.

[CLICK HERE TO VIEW: FAITH POSTER](#) ➔

MF have certainly noticed an increase in the number of inquiries we are getting relating to PBKDT.

During my time working with MF Clinic's, we supported a handful of patients following plant based Ketogenic Dietary Therapy (PBKDT). Mainly following vegetarian KDT. Only 2 patients were following vegan KDT, both had started out on their own. One needed a great deal of guidance from our dietitian, the other had an amazing knowledge and ate a very wide variety of foods.

Susan Baum specialist dietitian from Germany gave presentations at the 2021 Global symposium in Brighton and more recently at the GLUT1 conference in Aschaffenburg on how she manages vegan KDT. Interesting, but what are the practicalities?

All medical KDT's, because of their restriction in carbohydrate (CHO) need supplementation. Many patients also come with restrictions because of allergies/intolerance issues. So, what is the impact of further restriction?

Informed choice is what I am aiming for in this article. I decided the best way to gain further insight was to try vegetarian/Vegan KDT for myself.



MY EXPERIENCE OF FOLLOWING A PBKDT – WHAT DO I NEED TO BE AWARE OF?

Any diet can be poor, add on multiple anti-seizure medications (ASM's) which can interfere with vitamin and mineral absorption, and you can see why it is so important to get blood levels checked and to fill those food diaries in prior to starting KDT to find out if there is any baseline nutritional imbalances or deficiencies.

All KDT's, because of their restriction in carbohydrate (CHO) require supplementation. Medical KDT's need to be closely monitored by a specialist team.

[CLICK HERE TO VIEW: SUPPLEMENTATION](#) ➔



A good starting point was to look at the British Dietetic Association guidance regarding plant-based diets.

[CLICK HERE TO VISIT: BRITISH DIETETIC ASSOCIATION GUIDANCE PLANT-BASED DIETS](#) ➔

SOME SPECIFIC DEFICIENCIES TO BE AWARE OF FOLLOWING PBKDT	I WILL TRY TO INCLUDE KETO FRIENDLY FOOD SOURCES
Essential Omega-3 fat	Flax oil, nuts and seeds
B12	Soya milk and yoghurt
Calcium	Soya milk, nuts and seeds
Zinc	Egg, soy, mushrooms, nuts and seeds
Iodine	Seaweed
Vitamin D	Soya milk and yoghurt (Summer sunshine)
Iron	Spinach, nuts and seeds
Selenium	Brazil nuts
Carnitine	Avocado, tempeh, asparagus

PLANT-BASED DIETS ON KETOGENIC DIETARY THERAPY (PBKDT)



PROTEIN

I will need to find alternatives to fish and meat, like nuts and nut butters, seeds, tofu, tempeh, eggs and dairy, Quorn and seitan.

The link below also lists vegetables that are higher in protein.

[CLICK HERE TO VIEW: VEGAN KETO PROTEIN OPTIONS: TOP 30 FOOD SOURCES](#) ➔

Also see further guidance in the links below.

[CLICK HERE TO VIEW: THE HEALTHY VEGETARIAN KETO DIET](#) ➔

[CLICK HERE TO VIEW: ESSENTIAL NUTRIENT NEEDS ON A LOW-CARB VEGAN DIET](#) ➔

KDT VEGETARIAN WEEK

My husband is chief cook in our house but the omnivores in my house rebelled, I was on my own! I do know how to make up a keto meal, but I am not the greatest cook, so my plan was to keep things as simple as possible!

FAT

For vegan KDT I need to find alternative fat choices as dairy is no longer an option. This was not a problem for me as I do not include cow's milk products in my diet.

So, you will see although I could have used more dairy products like cream and butter during veggie week I tended to stick to the plant products, like Elmlea plant double cream and Pure spread.



The weekend before starting I shopped for the week and batched up Mo's rolls and muffins (slightly adapted with added flax) for the freezer. I had my porridge recipe ready for Monday morning. I thought I was very organised....



ROLLS (PER ROLL)

- Ground almonds 21g
- Flax seed 6g
- Egg white 18g
- Psyllium husk
- White wine vinegar
- Barkat
- Salt



PORRIDGE

- Ground almonds 22g
- Alpro soya light milk 150g
- Desiccated coconut 17g
- Flax 15g
- Oats 3g



RHUBARB MUFFINS

- Ground almonds 10g
- Desiccated coconut 6g
- Egg 12g
- Flax 3g
- Pure olive oil spread 8g
- Rhubarb 20g

FOOD DIARY

Day	Breakfast	Snack	Lunch	Snack	Tea	Drinks
Day 1	<ul style="list-style-type: none"> • Roll • 2 x eggs • 7g Pure olive oil spread • 13g Mayo • 50g Rhubarb • 25g Alpro soya Greek yoghurt 	-	<ul style="list-style-type: none"> • Waitrose rainbow salad, tomato removed • 30g Hard goat cheese • 10g Oil • 15g Mayo 	<ul style="list-style-type: none"> • 15g Meridian peanut butter • 50g celery 	<ul style="list-style-type: none"> • 80g Greek Cypriot grilling cheese • 56g Courgettes • 22g Peppers yellow • 23g Pepper red • 40g Mushrooms • 20g Lettuce • 15g Oil • 26g Mayo 	<ul style="list-style-type: none"> • Tea x4 • Mint tea x 2 • Water 1 litre • Diet coke 500ml
Day 2	<ul style="list-style-type: none"> • Porridge 	<ul style="list-style-type: none"> • 50g Olives • 20g Hard goat cheese 	<ul style="list-style-type: none"> • Roll • 30g Hard goat cheese • 13g Mayo • 7g Pure olive oil spread • 70g Cucumber in vinegar • 50g Strawberries 	<ul style="list-style-type: none"> • Rhubarb muffin 	<ul style="list-style-type: none"> • Omelette • 2 eggs • 63g Spinach • A couple of mushrooms • 23g Red pepper • 35g Lettuce • 33g Cucumber • 34g Strawberries • 10g Chilli oil • 26g Mayo 	<ul style="list-style-type: none"> • Tea x 6 • Water 1.5 litre
Day 3	<ul style="list-style-type: none"> • Porridge 	<ul style="list-style-type: none"> • 30g Peanuts 	<ul style="list-style-type: none"> • Roll • 40g Hard goat cheese • Spinach handful • 7g Pure olive oil spread • 26g Mayo • 34g Strawberries • 11g Blueberries • 25g Alpro soya yoghurt 	<ul style="list-style-type: none"> • 30g peanuts In the evening 	<ul style="list-style-type: none"> • Tofu 100g • A few mushrooms • 90g Celeriac • 15g Chilli oil • 7g Pure olive oil spread • 62g Broccoli • 13g Mayo 	<ul style="list-style-type: none"> • Tea x 6 • Water 2 litres • x2 small glasses dry red wine
Day 4	<ul style="list-style-type: none"> • Porridge • Flax now increased to 15g 	<ul style="list-style-type: none"> • 14g Walnuts 	Out <ul style="list-style-type: none"> • 3 egg omelette included: mushrooms, roasted red peppers, tomato, Iceburg lettuce & cucumber • Approx 5g CHO lunch • Mayo 26g 	-	<ul style="list-style-type: none"> • Roll • 40g Hard Sheep cheese • 50g Olives • ¼ tub Tsatsiki (Sainsburys) 	<ul style="list-style-type: none"> • Tea x 5 • Water 1.5 litres • x2 Diet coke 500ml • x2 small glasses dry red wine
Day 5	<ul style="list-style-type: none"> • Porridge 	-	<ul style="list-style-type: none"> • x2 Rhubarb muffin 	-	<ul style="list-style-type: none"> • 100g Tofu • 32g Spinach • 35g Tomato • 23g Red pepper • Roll • 15g Oil • 32g Mayo 	<ul style="list-style-type: none"> • Tea x 4 • Mint tea x 2 • Water 2.5 litre
Day 6	<ul style="list-style-type: none"> • Porridge 	<ul style="list-style-type: none"> • 30g Peanuts 	<ul style="list-style-type: none"> • Roll • 2 x boiled eggs • 7g Pure olive oil spread • 68g Cucumber • 26g Mayo • 55g Strawberries 	<ul style="list-style-type: none"> • Rhubarb muffin 	<ul style="list-style-type: none"> • 75g Quorn chunks • 10g Meridian peanut butter • 46g Cauliflower • A couple of mushrooms • 32g Spinach • 20g Chilli oil • 50g Coconut milk • 50g Alpro soya light milk 	<ul style="list-style-type: none"> • Tea x 5 • Water 1.5 litres • x2 Diet coke 500ml • x2 small glasses dry red wine
Day 7	<ul style="list-style-type: none"> • Porridge 	<ul style="list-style-type: none"> • ½ rhubarb muffin 	<ul style="list-style-type: none"> • 100g Tofu • Roll • 26g Mayo • 10g Oil • 67g Cucumber • 37g Strawberries 	<ul style="list-style-type: none"> • 15g Meridian peanut butter • 50g Celery 	<ul style="list-style-type: none"> • 75g Quorn mince • 86g Celeriac • 25g Avo • 10g Oil • 7g Pure olive oil spread • 20g Mayo • A couple of mushrooms • ¼ tsp Marmite • 35g Lettuce • 25g Celery • Fennel, seeds, rosemary and mint 	<ul style="list-style-type: none"> • Tea x 4 • Mint tea x 2 • Water 2.5 litre

PLANT-BASED DIETS ON KETOGENIC DIETARY THERAPY (PBKDT)

THE PRACTICALITIES

Day 1 – I was visiting my Mum by train

Maybe not so organised!

- I went to make the porridge for breakfast only to find that I had used all the ground almonds the day before in the rolls and muffins. Hence I had to make a quick switch to the keto roll & eggs, with rhubarb thrown in, you may notice a bit of a theme here? Extra flax, rhubarb...
- I found my scales flashing 'battery low' luckily my husband had a CR32 battery stash!
- I had planned strawberries & walnuts as a morning snack, but somebody finished all the strawberries last night. I ended up not having an AM snack.
- The peanut butter we had in was not as I thought Whole Earth brand, but Meridian so I needed to calculate less for my afternoon snack.
- I had intended to walk to the station, all the changes meant I was late and so ended up getting a lift to the station.
- On arrival I went to buy a ready prepared Greek salad at the local supermarket with its own pot of oil dressing. They had none. I had to buy separate salad, cheese and oil, luckily, I knew Mum had some mayonnaise.
- I was late getting home, but tea was quick and delicious.
- I realise looking at my fluid intake that I need to be drinking more water!



Day 4 was busy with my new grandson, Tom.

- Lots of bouncing him up and down on an exercise ball to get him off to sleep! We ate out in a café where omelettes were cooked to order. I asked that they add no milk to the omelette, perfect with a side salad and I took a squeeze bottle of Hellmann's mayonnaise in my handbag.
- That evening we ate 'picky' tea in the garden, so I ate cheese, olives and Tzatziki alongside one of Mo's rolls. I did buy some liver pate, forgetting I was vegetarian, but luckily realised when I was looking at the values oops! Mushroom pate was what I should have been looking at!

CLICK HERE TO VIEW: SAINSBURY'S ROASTED MUSHROOM PATE 100G ➔



Day 2 was an office day

- Ran much more smoothly, although packing the food up for the day before work took longer, I thought it may have been better to have prepared the packed lunch and snacks the night before. It was great to have the rhubarb muffins already made to just take out of the freezer as needed. I also found the 30g snack packets of peanuts handy, especially when out and about.

Day 3 after dinner we drove up to the midlands to visit my daughter.

- I kept my PM snack to have when we got there with a glass of wine.



Day 5 I find that bouncing on the exercise ball yesterday has taken its toll on my back!

- The drive back, stopping off at my Mums on the way, was pretty uncomfortable. I didn't feel like eating or cooking, hence no snacks and 2 muffins for lunch that day.

Following my experience on day 5

- It certainly makes sense where possible to have meals/ meal replacements batched and to make use of prescription products at these times.
- Below is a list of prescription products available. All vegetarian friendly but very limited on the vegan friendly products.

Company	Prescription Product	Vegetarian friendly	Vegan friendly
Nutricia	• Ketocal	Yes	No
	• MCT oil	Yes	Yes
	• Liquigen	Yes	Yes
	• Phlexyvits	Yes	No
	• Protifar	Yes	No
VitaFlo	• K.Flo	Yes	No
	• K.Yo	Yes	No
	• K.Kwik	Yes	Yes
	• K.Vita	Yes	No
	• MCT Procal	Yes	No
	• Fruitivits	Yes	No
Ketocare	• Ketoclassic bar	Yes	Yes
	• Ketoclassic savoury	Yes	No
	• Ketoclassic Muesli	Yes	No
	• Ketoclassic Porridge	Yes	No
	• Ketoclassic 3:1 Bisk	Yes	No
Cambrooke	• KetoVie 4:1 Peptide	Yes	No
	• KetoVie 4:1 Vanilla & Chocolate	Yes	No
	• Kwik Mix	Yes	Yes
Kanso	• DeliMCT CocoaBar	Yes	No
	• MCT oil 100%	Yes	Yes
Nutrinovo	• Prosource TF	No	No
	• Prosource TF plant	High CHO	No
	• Prosource jelly	No	No

REFLECTIONS ON KETO VEGGIE WEEK

Once more organised, I found Keto veggie week was certainly doable. I never felt hungry, in fact I felt like I never stopped eating! I enjoyed most of the food, even tofu, which I was dreading, fried in chilli oil with black pepper worked for me.

The Quorn mince was my least favourite, it did resemble cat food and, in a bid to add flavour, perhaps marmite was a step too far!

I would have liked to have included more foods but with one person eating the meals it would be too expensive to buy everything. I know frozen vegetables may be more cost effective, but I do love fresh vegetables! Perhaps it is better to keep things simple. I certainly soon knew the porridge amounts by heart, so breakfast was very quick.

Being in pain made me realise how hard it is for adults doing KDT for themselves when they are having seizures.

It also took me back to doing KDT for Greg, when either he or I were not feeling great. Seizures didn't always put him off eating, he did sometimes have seizures mid meal, have a brief sleep then eat the rest!

NUTRITIONAL ANALYSIS

Sue Wood Specialist Ketogenic Dietitian kindly analysed my Keto veggie week intake.

Average: 1669kcal, I did lose 1.3 kgs, likely fluid!

Average daily intake 20.4g CHO, 55g protein, 145g Fat. Ketogenic Ratio 1.9:1

I only had a couple of ketone strips in date so checked bloods on the morning of day 6.

Ketones 3.1mmol, glucose 4.2mmols. I think the ketones at that level was as a result of eating less food on day 5. On the morning of day 8 ketones were 2.2mmols, glucose 4.6mmols.

Vitamins and minerals – I didn't reach the recommended amounts for VitB1-Thiamin and only achieved the lower Reference intake for potassium. So not bad. I think that by taking a multivitamin supplement and perhaps using Low salt (contains potassium) for seasoning. I would then have been well within the nutritional guidelines.

PLANT-BASED DIETS ON KETOGENIC DIETARY THERAPY (PBKDT)

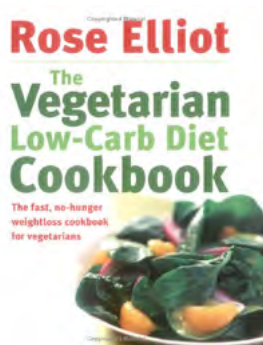
SIDE EFFECTS

Alas, by day 3 constipation was a problem, the Movicol came out, despite the rhubarb, flax and psyllium husk! I guess I need to drink more water, dance more?! To be fair I am the only person I know who backpacking through Southeast Asia needed to take senna!

I didn't feel any 'keto flu' like effect. I think this is because I generally eat low carb already, it wasn't such a huge transition for me.

This book, although aimed at weight loss contains some lovely recipes that are easily adapted for a stricter medical KDT.

[CLICK HERE TO VIEW: THE VEGETARIAN LOW-CARB DIET COOKBOOK](#) ➞



VEGAN KETO WEEK

Starting Vegan keto week, although I was initially daunted, having managed veggie week I thought it would be fine. I knew I had to concentrate on maximising my protein intake and specific vitamins.

I had my porridge recipe ready to go, but just added 50g extra Soya milk to boost protein content. Rolls and muffins were batched and frozen. Mo's vegan roll recipe, using egg replacer, inspired me to adapt the rhubarb muffins too.

The protein biscuits came later when I was struggling to get enough protein in through the day.

I would say that I was more organised starting out but underestimated the challenges and my gut.



ROLLS (PER ROLL)

- Ground almonds 20g
- Flax seed 6.5g
- Egg replacer 'Free & Easy' 1.5g
- Psyllium husk
- White wine vinegar
- Barkat
- Salt

PORRIDGE

- Ground almonds 22g
- Alpro soya light milk 200g
- Desiccated coconut 17g
- Flax 15g
- Oats 3g

RHUBARB MUFFINS

- Ground almonds 10g
- Desiccated coconut 6g
- Egg replacer 'Free & Easy' 1.5g
- Flax 3g
- Pure olive oil spread 8g
- Rhubarb 20g

PROTEIN BISCUIT

- Ground almonds 6g
- Egg replacer 1.5g
- Flax 6g
- Pulsin soya protein powder 5g
- Pure olive oil spread 5g
- Oil 1g
- Mixed spice

[CLICK HERE TO VIEW: FREE AND EASY EGG REPLACER - ASDA GROCERIES](#) ➞

[CLICK HERE TO VIEW: PULSIN SOYA PROTEIN ISOLATE 250G - TESCO GROCERIES](#) ➞

FOOD DIARY

Day	Breakfast	Snack	Lunch	Snack	Tea	Drinks
Day 1	<ul style="list-style-type: none"> • Porridge 	<ul style="list-style-type: none"> • 25g Peanuts 	<ul style="list-style-type: none"> • Roll x1 • 19g Vegan feta • 15g Walnuts • 10g Sesame seeds • 60g Spinach • 5g Pure olive oil spread • 10g Sesame Oil 	<ul style="list-style-type: none"> • 100g Alpro no sugar plain yoghurt Link here • 50g Elmlea plant double cream Link here • 22g Raspberries 	<ul style="list-style-type: none"> • No tea 	<ul style="list-style-type: none"> • 7 mugs of tea • 2.2 litres water • Movicol
Day 2	<ul style="list-style-type: none"> • Porridge 	<ul style="list-style-type: none"> • 25g Peanuts 	<ul style="list-style-type: none"> • 1 x roll • 55g Tofu • 5g Chilli oil • 30g Olives • 30g Spinach • 5g Pure olive oil spread • 15g Vegan mayonnaise • 200g Alpro soya light milk Link here 	<ul style="list-style-type: none"> • Rhubarb muffin 	<ul style="list-style-type: none"> • 70g Tempeh • 15g Chilli oil • 15g Vegan mayonnaise • 50g Kale • 50g Mushrooms • 50g Elmlea plant double cream • Raspberries 44g Link here 	<ul style="list-style-type: none"> • 6 mugs of tea • 2 litres water • Movicol
Day 3	<ul style="list-style-type: none"> • Porridge • 5g Soya pulsine protein powder 	<ul style="list-style-type: none"> • Peanuts 30g • 1 x packet seaweed snack 	<ul style="list-style-type: none"> • Roll x1 • 63g Tofu • 5g Chilli oil • 10g Pure olive oil spread • x1 Avocado small • 15g Mayo • 15g Spinach • 70g Cucumber 	<ul style="list-style-type: none"> • 25g Almonds 	<ul style="list-style-type: none"> • 20g Edamame pasta Link here • 50g Elmlea cream • 15g Mayo • 50g Mushrooms • 10g Oil • 20g Olives • 14g Red pepper • 15g Walnuts • 200g Alprosoya no sugar milk 	<ul style="list-style-type: none"> • 7 x mugs tea • 1.5 litres water
Day 4	<ul style="list-style-type: none"> • Porridge 	<ul style="list-style-type: none"> • 15g Meridian peanut butter • 50g Cellerly • 5g Pure olive oil spread 	<ul style="list-style-type: none"> • Roll x1 • 61g Tofu • 5g Chilli oil • 10g Pure olive oil spread • 15g Mayo • 58g Cucumber 	<ul style="list-style-type: none"> • Rhubarb muffin 	<ul style="list-style-type: none"> • 86g Celeriac • 40g Mushrooms • 40g Spinach • 10g Oil • 10g Olives • 12g Vegan cheddar • 40g Tofu • 10g Vegan mayonnaise • 30g Peanuts Link here 	<ul style="list-style-type: none"> • 6 x mugs tea • 2 litres water • 1 x small glass red wine
Day 5	<ul style="list-style-type: none"> • Porridge 	<ul style="list-style-type: none"> • Protein biscuit • 100g Alpro soya light milk 	<ul style="list-style-type: none"> • 300g Alpro light milk • 20g Brazil nuts • 30g Vegan feta • 5g MCT oil • 15g Flax oil • 10g Olives • 20g Pepper yellow • 30g Spinach baby • 5g Spring onion • 30g Cherry tomato • 20g Red pepper • Vinegar/herbs 	<ul style="list-style-type: none"> • Rhubarb muffin 	<ul style="list-style-type: none"> • 5g MCT • 20g Coconut Oil • 50g Tofu • 100g Cauliflower • 50g Elmlea plant cream • 10g Meridian peanut butter • 30g Spinach • 5g Spring onion 	<ul style="list-style-type: none"> • Tea 6 x mugs • Water 1.5 litres • Red wine x2 small glasses • + 400ml Alpro soya light milk with meals



PLANT-BASED DIETS ON KETOGENIC DIETARY THERAPY (PBKDT)

THE PRACTICALITIES

Breakfast – Again, kept very simple with the porridge.

Day 1

- All went well up until lunch time. I planned a salad with Vegan feta, it was only when I looked at the nutritional values that I was shocked to find it contained no protein, it also contained some carbohydrate, 2g in 19g so less salad!
- The nuts and sesame seeds added a bit of protein but really not enough. The salad was delicious; however, it seems the sesame seeds and I were incompatible. I did manage an afternoon snack but by teatime I was still tasting sesame seeds felt nauseous and very uncomfortable.
- The thought of eating Tempeh (fermented tofu) for tea was not helping. I just tried to drink more and took Movicol.

[CLICK HERE TO VIEW: VIOLIFE GREEK WHITE BLOCK VEGAN ALTERNATIVE TO CHEESE 230G ➔](#)



FAT

I don't seem to have any problem getting fat in, along with some of my own to burn! However, it became clear that it would be good to include some MCT fat to allow for more CHO! Increasing CHO would also boost protein intake from vegetables, fruit and even perhaps a small amount of additional pulses.

NUTRITIONAL ANALYSIS

- Average: 1638kcal.
- Average daily intake 22.1g CHO, 47g protein, 143g Fat. Ketogenic Ratio 2:1
- I had no ketone strips, but I did check my breath ketones. I was in ketosis.
- Vitamins and minerals – most concerning was a deficiency in selenium and iodine, especially as I had included seaweed on day 3 and brazil nuts on day 5. Calcium was a bit high; I think from the amount of Soya milk I used.

PROTEIN

The vegan cheese and the egg replacer, did not contain protein.

I was quickly learning that nuts, seeds and the minimal amount of carbohydrate allowed on KDT would only equate to a small percentage towards my protein intake. I was not keen to eat tofu every day. Also, even the tofu contributed to the carbohydrate intake, even a gram of carbohydrate was a big difference when I was aiming for around 5g in a meal!

The edamame bean pasta was useful to give my protein a boost.

I had thought I could use the Quorn from veggie week for a meal, but the Quorn pieces and mince I used in veggie week contained egg, so were not vegan friendly. Some Quorn is fine to use, so check the labels.

[CLICK HERE TO VIEW: QUORN VEGAN PIECES 280G - TESCO GROCERIES ➔](#)



I realised that the soya milk as a drink could be used to increase my protein intake. I also ordered some soya protein powder.

I tried adding the powder to porridge and mixed in soya milk to make a shake, but I was not keen. That's when the protein biscuits came in. They were crunchy, tasted good and with a drink of soya milk alongside contributed 10g protein just in a snack.

An alternative could have been pea protein, also low in CHO.

[CLICK HERE TO VIEW: PULSIN PEA PROTEIN ISOLATE POWDER 250G - TESCO GROCERIES ➔](#)

There did not seem to be a prescription protein powder that was vegan friendly. They contained either milk protein (Protifar) Hydrolysed collagen or gelatine (Prosource).

[CLICK HERE TO VIEW: VEGAN KETO PROTEIN OPTIONS: TOP 30 FOOD SOURCES ➔](#)

REFLECTIONS ON KETO VEGAN WEEK

I was surprised at what a difference following vegan keto was as opposed to following veggie keto. It didn't help that the aftereffects of the sesame seeds impacted on the rest of the week! I think I would have built up the MCT oil to allow for an increase in CHO, but I didn't think my stomach would tolerate an increase. It was a shame, but I decided to stop after day 5 to allow my stomach to settle down. To be honest from day 1 it just felt like I was forcing food in. I think I would have been fine if I hadn't eaten the sesame seeds. I wonder if intolerance issues do sometimes effect a person's ability to tolerate KDT if undiagnosed?

I hadn't realised quite what a struggle it would be to find enough protein. I certainly had a lot of soy. Pea protein unfortunately was not an option for me.

I also thought afterwards I could have used some of the online bread that is high in protein. When I checked though some contain egg or milk products so best to check. The chia seed Sukrin mix seems ok, though not a huge protein content, in fact Mo's vegan rolls were higher in protein!

[CLICK HERE TO VIEW: SUKRIN-CHIA-BREAD-MIX ➔](#)

Despite trying hard to cover all the vitamins & minerals I still came out with low levels. The prescription vitamins/minerals are not vegan friendly. There are however over the counter options available. These would need to be checked by your dietitian to ensure that individual needs are covered.

[CLICK HERE TO VIEW: CHEWWIES - VEGAN VEGETARIAN HALAL SUGAR FREE VITAMINS ➔](#)

[CLICK HERE TO VIEW: NATURES AID KIDZ MULTI-VITAMINS & MINERALS, NATURES AID UK ➔](#)

[CLICK HERE TO VIEW: VEGAN MULTIVITAMINS & MINERALS WITH HIGH STRENGTH VITAMIN ➔](#)

Iodine can be included by adding seaweed into the diet. The easy option is to use the snack packs like I did, but if you forage yourself you need to know which seaweed and what to do with it.

[CLICK HERE TO VIEW: 10 DIFFERENT TYPES OF EDIBLE SEAWEED ➔](#)



The fermented tofu (tempeh) was my least favourite meal, celeriac steak fried in Pure and then baked in the oven as a pizza base was delicious!

I realised some of the Natural ketosis Fatt bars are vegan friendly so would have been a great snack whilst out and about. There are also vegetarian and vegan low CHO options within their meals, they are aimed at weight loss and would need fat/protein added. Perhaps pea protein powder would work in soup, fat could be easily added or serve with Mo's rolls? Maybe useful for back up during illness or hospital admissions.

[CLICK HERE TO VIEW: SNACKS - DELIVERED REAL FOOD DIET | NATURAL KETOSIS COMPANY ➔](#)

[CLICK HERE TO VIEW: CHILLI BEAN SOUP - LUNCH | NATURAL KETOSIS ➔](#)

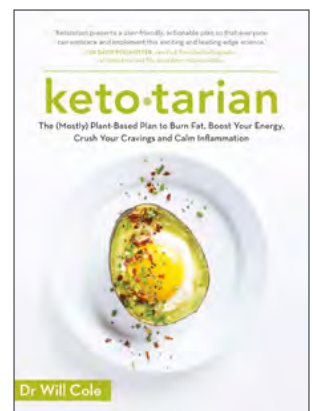
[CLICK HERE TO VIEW: COCONUT & KALE SOUP - LUNCH | NATURAL KETOSIS ➔](#)



I found this book to be very informative. I did think that the ingredients suggested on a budget would be a stretch and that Dr Cole must have spare room to fit all the supplements in though.

[CLICK HERE TO VIEW THIS BOOK ON AMAZON ➔](#)

I found following vegan KDT challenging, mostly I think because I was trying to include all essential nutrients in an already restricted KDT. It certainly requires expert training/support. With such a diverse population in UK further resources/training would I think be helpful?



One thing I am sure of is that if you are following a medical KDT you need a ketogenic team to support you, supporting KDT alongside further restriction to food, makes it all the more essential, to avoid serious vitamin/mineral deficiencies.

SEASONAL RECIPES

VEGETARIAN & VEGAN SPECIAL

Following on from Val's amazing plant-based diets article, of course we had to share some great vegetarian and vegan recipes from the Matthew's Friends Keto-kitchen. Tried & Tested, as always!



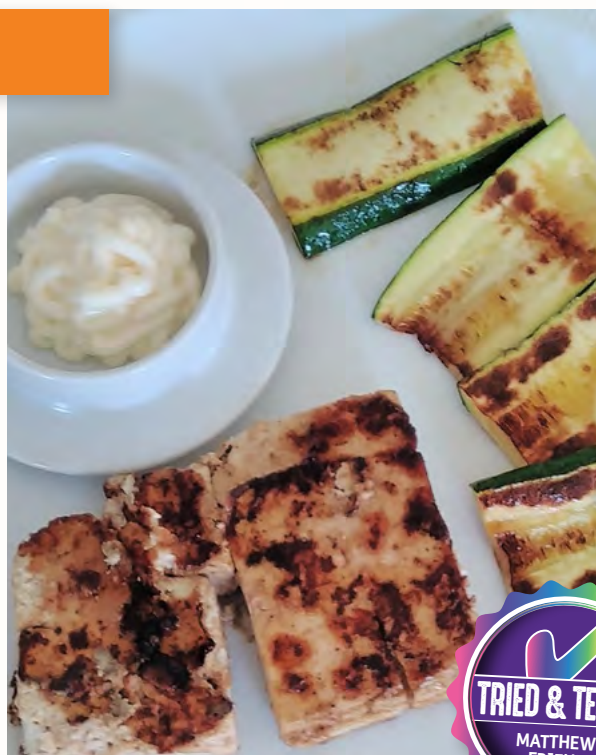
BBQ TOFU WITH COURGETTE

INGREDIENTS

- 100g Tofu – CAULDRON BRAND
- 60g Courgette
- 8g Soy sauce – LIGHT AMOY
- 3g Sukrin gold
- 4g Sesame oil
- 5g Vegetable oil
- 14g Mayonnaise – HELLMANN'S VEGAN
- You will also need a good pinch of ground ginger.

METHOD

- Drain the tofu and wrap in kitchen roll for as long as you can to get it as dry as possible, applying pressure helps!! Then weigh it.
- Mix together the soy sauce, Sukrin gold, ginger and half of the sesame oil.
- Cut the tofu into two thick slices.
- Coat the tofu in the soy sauce mixture and leave in the fridge until you are ready to cook it and the marinade has been absorbed.
- Cut the courgette in long slices and coat with the remaining sesame oil and vegetable oil.
- Cook the courgette on the BBQ until they are tender and browned, keep in a warm place.
- Add the tofu to the BBQ and cook for approximately 5 minutes, turning them until they are browned on both sides.
- Drizzle the tofu with any remaining oil and serve with the courgette and mayonnaise as dip.



MO'S TIP

If you are not having a BBQ this can be cooked well in the kitchen using a griddle pan or small frying pan.

MKD 3.62G CHO TOTAL

FAT: 26.41G

CHO: 3.62G

PROTEIN: 14.29G

KCAL: 309

PLEASE ENSURE YOU CHECK PRODUCT LABELS FOR VALUES

These recipes will need to be adapted to EACH INDIVIDUALS prescription.
Please take these recipes to your dietitian and he / she will help you to do this.

PLEASE DO NOT ATTEMPT ANY TYPE OF KETOGENIC DIET WITHOUT MEDICAL SUPERVISION

VEGETARIAN TOMATO RISOTTO

INGREDIENTS

- 70g Cauliflower
- 10g Onion
- 2g Fresh basil
- 12g Parmigiano Reggiano cheese
- 25g Olive oil
- 30g Mushroom
- 33g Tomato
- You will also need a little vegetable stock made with ¼ of a KNORR stock cube and 2g of GIA garlic paste.

METHOD

- First grate the cauliflower to make rice, then weigh it.
- Chop the onion, tomato, basil and mushrooms, I kept 3 basil leaves to use for serving but this is optional.
- Heat the oil and fry the onion gently until soft, then add the mushrooms and garlic puree, cook for 1 minute.
- Add the cauliflower rice and stir fry for 1 minute, then add the chopped tomatoes and just enough stock to moisten, cook for another minute. I found 15mls of stock to be enough.
- Add the basil and half the grated Parmigiano cheese, stir until it has melted.
- Serve topped with remaining cheese and the basil leaves.

MO'S TIP

You could use dried herbs in place of the basil if preferred. I like to skin and deseed the tomato before weighing – it is a bit fiddly but worth it. It is easy to make this a vegan dish by using vegan cheese, but you may need to adjust the values according to the brand you use.



MKD 5.01G CHO TOTAL

FAT: 29.06G

CHO: 5.01G

PROTEIN: 6.46G

KCAL: 307

TOFU NUGGETS WITH TOMATOES

INGREDIENTS

- 86g Tofu – CAULDRON BRAND
- 5g Golden flaxseed flour – DHILLONS FLOUR MILL
- 2g Paprika
- 20g Vegetable oil
- 2g Garlic granules
- 50g Cherry tomatoes
- You will also a little salt and pepper to taste.

METHOD

- Prepare the tofu by draining it well. Wrap in kitchen roll and apply pressure with a weight, leave in the fridge. Or to speed things up, keep applying pressure by hand using fresh paper or a Jey cloth. When it feels dry weight it.
- Cut the tomatoes in half, set aside.
- Slice the tofu into 8 pieces, I cut the 86g piece into two slices, then each one into four.
- Mix the garlic granules and paprika into the flax, then season with a little salt and pepper.
- Add the tofu and coat the pieces well, it does stick on OK.
- Heat the oil in a small frying pan and fry for 2 or 3 minutes on each side, until they are nice and crunchy.
- Place on a warm serving dish.
- Toss the tomatoes in the residue in the pan. They do not need to cook for long, just make sure they are well coated with the oil mixture.



MKD 3.88G CHO TOTAL

FAT: 28.45G

CHO: 3.88G

PROTEIN: 13.49G

KCAL: 326

VISIT MATTHEW'S FRIENDS

#KetoKitchen YouTube channel

FOR KETOGENIC RECIPE DEMONSTRATIONS AND TUTORIALS!

VEGETARIAN VEGETABLE MUFFIN

INGREDIENTS

- 37g Butter
- 10g Carrots - boiled in unsalted water
- 28g Egg
- 9g Parsnips - boiled in unsalted water
- 13g Ultra fine fiberflour LONJEVITY FOODS
- 13g Golden flaxseed flour DHILLONS FLOUR MILL
- 12g Mature cheddar cheese You will also need ¼ teaspoons of BARKAT baking powder and a pinch of mustard powder.

METHOD

- Pre heat oven to 190c / fan 170c / gas 5.
- Reserve 16g of the butter.
- Mash the cooked carrot and parsnip together.
- Grate the cheese finely.
- Mix together the fiberflour, flaxseed, Barkat, mustard and grated cheese.
- Soften 21g of butter and mix with the mashed vegetables.
- Add to the dry ingredients, with the beaten egg, mix everything together well.
- Put in a muffin mould, cook in preheated oven for 15 - 20 minutes.
- Serve cold, split in half and spread with butter.

MO'S TIP

This is a good way to use up left over vegetables from a family meal, and makes a good packed lunch. This is a large muffin and would easily make two smaller ones. Ideal for snacks or a side dish.



MKD 5.02G CHO TOTAL

FAT: 42.30G

CHO: 5.02G

PROTEIN: 12.58G

KCAL: 451

VEGAN SESAME CRACKERS

INGREDIENTS

- 30g Golden flaxseed flour – DHILLONS FLOUR MILL
- 1g Garlic granules
- 1g Dried rosemary
- 2g Sesame seeds
- You will also need a pinch of salt and some cold water, I found 15mls to be enough.

METHOD

- Pre heat oven to 170c / fan 150c / gas 4. The rosemary needs to be fine so you may need to chop it.
- Mix together the flaxseed flour, garlic granules, rosemary, sesame seeds and salt.
- Mix to a dough with cold water, this can be mixed with a spatula until it starts to form a dough, then just knead it lightly.
- Roll it out into a thin layer, approx 6 inch x 4 inch. This is best done between sheets of baking paper, keeping the sides straight.
- Transfer it to a baking tray then remove the top layer of baking paper.
- Cut into equal pieces on the tray, place in the oven and cook for approximately 12 minutes.
- For a really crisp cracker, cook for a further 5 minutes.

MO'S TIP

These will keep in an airtight container for a few days. You could use dried thyme rather than rosemary if preferred.



MKD 2.88G CHO TOTAL

FAT: 12.30G

CHO: 2.88G

PROTEIN: 7.20G

KCAL: 151

PLEASE ENSURE YOU CHECK PRODUCT LABELS FOR VALUES

These recipes will need to be adapted to EACH INDIVIDUALS prescription.

Please take these recipes to your dietitian and he / she will help you to do this.

PLEASE DO NOT ATTEMPT ANY TYPE OF KETOGENIC DIET WITHOUT MEDICAL SUPERVISION

VEGAN BREAD ROLLS

INGREDIENTS

- 160g Ground almonds
- 25g Psyllium husk
- 9g Egg replacer - FREE AND EASY BRAND
- 160g Boiling water
- 15g White vinegar
- You will also need 1 teaspoon of salt, 2 teaspoons of BARKAT baking powder and 45mls of COLD water.

METHOD

- Pre heat oven to 180c / fan 160c / gas 5.
- Mix the ground almond with the psyllium husk, baking powder and salt.
- Gradually mix the egg replacer with 45mls of COLD water, then add the vinegar, leave for 1 minute, then add the almond mixture, mix well.
- Pour in the BOILING water and mix until a dough forms.
- Grease a baking tray or line with a non-stick liner.
- Divide into 6 equal portions, then shape into bread rolls, you will find a spoon helps to shape them.
- Bake for approximately 40 minutes until cooked through then leave to cool on a wire rack.



MO'S TIP

Other brands of egg replacer are available, just check the values.
Each roll will give: **14.88g fat / 5.62g protein / 1.92g CHO**

MKD 11.54G CHO TOTAL

1.92 G CHO PER ROLL

FAT: 89.29G

CHO: 11.54G

PROTEIN: 33.77G

KCAL: 985

VEGAN FLAXSEED COOKIES

INGREDIENTS

- 40g Golden flaxseed flour
- DHILLONS FLOUR MILL
- 20g Sukrin gold
- 20g Plant butter - FLORA
- 10g Almond milk - ALPRO
- You will also need a few drops of vanilla or almond extract.

METHOD

- Pre heat oven to 170c / fan 150c / gas 4.
- Mix together the flaxseed flour and Sukrin gold.
- Soften the plant butter, then add the dry ingredients with the extract and Alpro milk.
- Divide equally into 6 lightly greased patty tins, press down each one to smooth the tops.
- Bake for 15 – 20 minutes, then cool in the tin on a wire rack.



MO'S TIP

These will keep for 2 – 3 days in a container, but up to a week in the fridge. They do freeze OK. If you do not have any Alpro, then water will be OK. You could omit the extract and use a spice of your choice, ginger is good.

MKD 3.37G CHO TOTAL

FAT: 30.55G

CHO: 3.37G

PROTEIN: 8.94G

KCAL: 324

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FOR KETOGENIC RECIPE DEMONSTRATIONS AND TUTORIALS!

NUTRICIA KETO CONFERENCE NEWCASTLE JUNE 2023

The conference was a great chance to hear in more depth about ongoing research projects and to share differences/similarities in clinical practice to promote best practice for all.



Professor Helen Cross OBE set the scene with an excellent overview of where we are now in terms of the evidence, mechanisms, and future direction of KDT.



Mackenzie Cervenka, Professor of Neurology at Johns Hopkins (responsible for developing the adult ketogenic service in 2010) gave 2 amazing talks, the first focussed on the latest information available on the risks of using KDT during pregnancy and breast feeding.



Dr Natasha Schoeler RD, Senior Research fellow at UCL Great Ormond Street Institute of Child Health and Specialist Dietitian at Great Ormond Street Hospital presented on the final results from the infant trial.

Infants (age 1-24 months) with epilepsy were randomised to receive a classical KDT or a further anti-seizure medication (ASM). The number of seizures were counted during weeks 6 – 8 of the trial in comparison to baseline seizures prior to starting.

To conclude there was very little difference in terms of seizure numbers, KDT and new ASM's were equally effective. However overall health, socialisation, and communication at 12months was more favourable in those following KDT.

Currently evidence is limited to a few case studies and anecdotal stories. There was much discussion around collating more evidence from the wider population of low carbohydrate users during pregnancy, perhaps more answers are not far away?!

Dr Cervenka's second talk was around transition into adult services. She advises starting the transition process early, age 15-16, including the possibility on continuing KDT into a supportive adult service!

Dr Cervenka was very excited that there has been a recent research paper published. Dr Tripathi in India (published in Neurology journal) A randomised controlled trial looking at the efficacy of KDT in adults. Hopefully breaking down those barriers of doubt in the minds of many adult neurologists and giving them another treatment option when ASM's have failed.

[CLICK TO VIEW: KETO IS NOT JUST FOR KIDS ➞](#)

Matthew's Friends are very keen to promote/fund/support adult services for young people to transition into!



Dr Anita Devlin Consultant Paediatric Neurologist at the Great North Children's Hospital Newcastle hosted the event and presented alongside her team;



Dr Liz Neal Specialist dietitian. After 10 years working in our MF Clinics, Liz has now become involved in research, setting up a KDT registry, aiming to help answer key questions in a collaborative way to aid future research and ultimately, practice.

Dr Sally Willis, Clinical Psychologist. Imogen Clark and Ruth Ord, Specialist paediatric dietitians and Lucy Bellis paediatric nurse.

Their presentation looked at the delivery of KDT in paediatric palliative care. Reflecting on case studies generated a great deal of discussion regarding the roles of team members, how they shared communication links with outreach palliative care and revised attitudes to levels in monitoring to allow families the space to a less medicalised life whilst maintaining a duty of care.

The registry will now be piloted in four KDT centres in UK and Europe to ensure it as user friendly as possible and to provide further information for future funding applications, prior to wider international roll out.

NUTRICIA KETO CONFERENCE NEWCASTLE JUNE 2023



Laura Healy RD, clinical specialist dietitian St James Hospital, Dublin, outlined her study looking at whether KDT is underutilised in uncontrolled epilepsy.

She concluded that despite KDT being used for over 100 years and evidence that the chance to gain control of seizures diminishes with each successive ASM tried that this may be the case.

Barriers are largely unexplored but possibly originate from both patient/family – related factors and clinician, health system components that bias towards continued trials of ASM's despite the evidence.

She concluded that despite some patients achieving significant benefits while on the KDT, it remains a challenge for patients to access, initiate and continue the diet long term, and a challenge for clinicians in how to identify ideal candidates for KDT.



Dr Jen Carroll RD presented on her 'Core Outcomes' research.

Although outcomes like seizure numbers are something that can be counted, things like quality-of-life outcomes are not so easy to measure. She explained her hopes to either adapt an existing tool or to create a bespoke tool to include and measure the core outcomes outlined in the study.



Victoria Whiteley RD, Advanced Clinical Practitioner, Manchester Children's hospital, presented on her research project into the cost of implementing Ketogenic Dietary Therapy (KDT) in the UK.

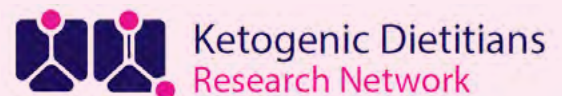
This is a direct response to the 2021 updated NICE guidelines which highlighted the lack of data regarding cost of KDT in the UK.

She concluded that the average cost for 2 years on KDT was around £15,000, with a variance between around £8,000 and £23,500 which is in line with the provision of other medical diets in the management of inherited metabolic diseases and lower than the predicted costs of care as usual in the literature.

This data will be part of a larger health economic analysis of KDT looking at cost effectiveness, to inform national guidance in the future.



Ketogenic Dietitians Research Network (KDRN) Meeting June 2023



Julie and Val attended the KDRN meeting in Newcastle. The meeting was well attended both face to face and online. It was great to share and update on exciting projects that are in progress. To find out more about the work of the KDRN, visit www.kdrn.co.uk

EUROPEAN GLUT1 CONFERENCE

Julie and Val attended the GLUT 1 conference in Aschaffenburg, Germany. We were made very welcome by our host Joerg Klepper and his lovely family, who all chipped in to help make sure all ran smoothly. It was great to meet up with all the families, old friends and meet some new from all over Europe. The presentations covered the latest science, clinical, practical, and social aspects of GLUT 1, they are very well summarised in the link below, from the Glut1D Foundation.

[CLICK TO VIEW: CONFERENCE SUMMARY ➡](#)



Monica Ruitjer & Dr Elles van der Louw from Matthew's Friends Netherlands at the MF exhibit table.



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CALLING ALL KETO BLENDED DIET FEEDERS!



WRITTEN BY SUSAN WOOD, RD

Some of you choose to blend home prepared ketogenic meals for your child's tube feeds rather than use the commercial feeds available on prescription.

The reason why depends on your individual circumstances and of course appropriateness for your child. It could be your family's choice, to allow control over food ingredient quality and range or it could be a necessity because your child has difficulties tolerating the prescribed feed options.

In recent years, the 'blended feed' option has certainly gained greater acceptance amongst health professionals and the British Dietetic Association published its practice toolkit 'The Use of Blended Diet with Enteral Feeding Tubes' in November 2021 and the Ketogenic Dietitians Research Network published their information booklet on Blended Ketogenic Diet in 2022.^{1,2}

But what can you do if you are caught short, needing the convenience of picking up a ketogenic feed 'off the shelf' as a stop gap due to unforeseen circumstances, but not able to use the standards available?

Well, we have recently learned of one commercially blended feed (i.e. based on real food ingredients) that may be useful for some, with individualised adjustment as required.



It's the Chicken & Root Vegetable Casserole blend from Wilbo's Blends.³ Each 275g pouch provides 289kcal, 24g fat, 7.2g carbohydrate and 5.8g Protein, so it starts out at a 1.85 ketogenic ratio, but would lend itself to adjustment to meet individual calorie and ketogenic ratio needs. For example:

- Add 2g fat (e.g. 4ml Calogen) and you have a 2:1 ratio feed providing 307kcal.
- Add 15g fat (e.g. 30ml Calogen) and you have a 3:1 ratio feed providing 424kcal.

As always with ketogenic diets, individualisation is crucial so do speak to your keto dietitian if you wish to change the way you are delivering your keto blended feeds or have any queries about new food products or ingredients.



LINKS TO REFERENCES:

¹ FINAL Practice Toolkit: The use of blended diet with enteral feeding tubes Nov 2021

² KDRN BKD Booklet 2022

³ Wilbos blends

KetoCare products are foods for special medical purposes and must be used under strict medical supervision.

Sheffield Teaching Hospitals NHS Foundation Trust - Adult Ketogenic Service

SERVICE
REPORT
JULY 2023

WRITTEN BY
ROWAN SUTHERILL RD



BACKGROUND INFORMATION

Whilst paediatric ketogenic services exist widely throughout the UK to offer dietary treatment for refractory epilepsy, adult services are scarce in comparison, with only London and Birmingham having established resources prior to the development at Sheffield Teaching Hospitals NHS Trust (STH).

Sheffield Adult Ketogenic Service started in 2018 with 2 years research funding, which expired in 2020, when the service existed temporarily (unfunded) for existing patients only. Two years external funding was then kindly offered by Matthew's Friends (MF), allowing the service to grow and develop between 2021 and 2023. The service is now funded by Neurology as part of the Head and Neck Directorate at STH.

CURRENT SERVICE

Throughout its existence, the service has been funded for 0.4 WTE dietetic input, provided by Rowan Sutherill (Specialist Dietitian). The caseload currently holds 15 patients on various forms of ketogenic diet including Classical (both oral and PEG fed), Modified Ketogenic Diet, Medium Chain Triglyceride Diet and Low Glycaemic Index Diet. The MF funding allowed us to again accept new referrals into the service, with the addition of existing patients transitioning from paediatric services.

Ketogenic Dietitians Research Network (KDRN) guidelines recommend 30 patients per 1.0 WTE dietetic resource (based on paediatric caseloads). Within our STH 0.4WTE adult caseload, 6 are transition patients already established on diet at the time of transfer and 4 are LGIT patients, requiring less intensive intervention by the nature of this diet option. The remaining 5 patients are on MKD and MCT dietary treatments. Consequently, we do have some capacity to increase the patient caseload beyond our current 15 patients. Determining an appropriate adult caseload is part of our development plan.

The MF funding allowed us to accept new and transition patients from around the UK. Now we are Trust funded, all dietetic activity is linked to the referring consultant. Unfortunately, the absence of Neurologist funding to take on the care of these patients, prevents us from taking further new referrals or transition patients from outside of the Sheffield catchment area. The (STH) VNS MDT is now considering all patients on their waiting list for appropriateness of considering ketogenic diet to maximise use of the service available and offer alternative, less invasive treatment options to our patients.

The funding from Matthew's Friends has not only maintained and allowed development of our adult ketogenic service, but it has also facilitated Rowan's upskilling and learning in this clinical area. There have been opportunities to share this knowledge through KetoCollege (LGIT session),

KetoConference (speaking about setting up an adult service) and joining a Specialist Advisory Group for Adult Ketogenic Services to consider development in this area.

The MF funding has allowed us to retain existing patients within the service to receive ongoing support on a ketogenic diet. It has allowed us to transition some patients from paediatric services into our adult service as required and to continue supporting Sheffield Children's Hospital to transition local patients. The profile of ketogenic diets within STH has been raised as another treatment option that our Neurologists are beginning to consider for patients with refractory epilepsy. It has also provided our patients (and their family/carers) with a quality of life that had been missing for many years:

PATIENT TESTIMONIALS

"For the first time in years, I have confidence to travel on public transport by myself without fear of seizures."

"He is calm, he doesn't fight me or throw things, he is now able to speak in full sentences (not individual words), he can sit and do puzzles, he is learning to read and write, and he sleeps ... we all sleep."

"I am finally able to learn to drive ... the diet has changed my life."

FURTHER DEVELOPMENT OF THE SERVICE

With 2 Consultant Neurologists now working closely with the service, our initial development plan is to work towards funding for both medical and nursing input into the service. This would allow us to accept new and transition referrals from beyond Sheffield and would inevitably increase our caseload. To add resilience to the service, we hope to eventually increase funded dietetic time in line with service growth.

SUMMARY

The funding from Matthew's Friends has allowed us to build the Adult Ketogenic Service in Sheffield and provided a more solid foundation on which to develop it further, providing necessary dietary support to new and existing patients from within and beyond the Sheffield area. We have also motivated and inspired other NHS Trusts to work towards developing further adult ketogenic services within the UK. Most important of all, the STH service has improved the quality of life for our patients and their families.

STH would like to thank Emma Williams and all the Trustees at Matthew's Friends for their significant support.



Approximate Nutrition Information (entire recipe)

Serving suggestion

Carbs 6.83g	Calories 338	Fat 32.17g	Protein 3.55g	Ratio 3:1:1
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Ingredients:

4.5g sushi nori
100g slim sticky rice
35g cucumber, raw, flesh and skin
23g spring onions, bulbs and tops, raw
20g mayonnaise
5g KetoCal 3:1 Powder
13ml MCT Oil

Method:

1. In a bowl mix the rice, KetoCal, and MCT oil, season to taste with salt and fresh pepper.
2. Cut the cucumber and onion into small batons.
3. Place a sheet of the nori onto a board and place half the rice and spread over (wet your fingers so it is easy to spread out).
4. Now spread over half the mayo and add the cucumber and onion, roll up tight and slice into $\frac{3}{4}$ inch slices, repeat with the second sheet of nori & serve cold.



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Ketoconnectnutricia



NutriciaKetoConnect



Nutricia KetoConnect

These recipes are intended for patients who have been prescribed a KetoCal product by a healthcare professional. KetoCal is a Food for Special Medical Purposes for the dietary management of drug resistant epilepsy or other conditions where the ketogenic diet is indicated and must be used under medical supervision.

Always consult your managing healthcare professional before making dietary changes.

Allergens may be present, please check individual product and ingredient labels. If concerned about allergens please contact your healthcare professional.

NUTRICIA
LIFE-TRANSFORMING NUTRITION

This recipe was created on MYKETOPLANNER:
The dietary planning tool that provides flexibility and variety
for the ketogenic community. MyKetoPlanner.co.uk

Check
meals
on the go

Search
and
edit recipes

Create
daily meal
plans



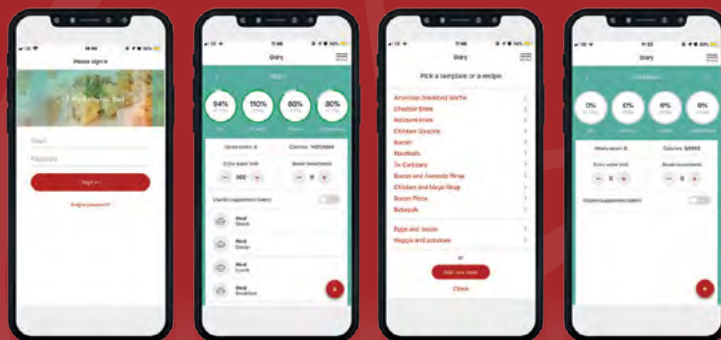
The My Ketogenic Diet App, from Vitaflo®.

Informed & In touch. It's made for you.

The **My Ketogenic Diet App** from Vitaflo has been created for patients who are already following, - or who are thinking about following - a ketogenic diet.

The App allows you to log and record:

- The foods you eat
- Your ketone and glucose levels
- Your seizures
- *And much more*



Via the App you can share this information **directly with your Dietitian**, allowing them to track your daily progress and help you reach your fat, carbs and protein targets.

So, no more spreadsheets and diaries to take to the clinic.

To find out more about the My Ketogenic Diet App, contact your Healthcare Professional.



Enhancing Lives Together

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KETO OFEST



Keto and Low Carb Festival

Sunday 17th September

11am - 6pm

**The Bond
180-182 Fazeley Street
Birmingham B5 5SE**

[Click here to Book your Free Tickets](#)

Visit our Matthew's Friends exhibit table at this exciting event and say Hi! to Lee Morgan, our Facebook Forum chat host and charity volunteer.

Lee will have our charity information available and is ready to chat all things Keto!



FUNDRAISING FOR MATTHEW'S FRIENDS

We are so grateful in these difficult times for the kind support and generosity of you all. Please like and follow us on [f Matthew's Friends](#) and [Twitter @matthewsfriends](#) for up to date news on all our events. Please support us and request an MF fundraising pack today from enq@matthewsfriends.org

WE'D LIKE TO THANK THESE FABULOUS FUNDRAISERS!

OXTED PRAM RACE 2023



The pram race in Oxtd has been run since 1977 and is a great fun event that raises funds for local charities, we are incredibly grateful to have been nominated by the Committee to receive a share of the £8500 proceeds, which will be put to excellent use!

This year the 'Soakbox' was held on Sunday 25th June and, as in past years, Matthew's Friends provided the trophies. It was a blisteringly hot day with the entrants being glad of the hoses and water pistols that were aimed at them by onlookers!

As you can see from the photos, it really is a brilliant, slightly mad event. If you live near to Oxtd why not join in next year?

Many thanks to all involved.

[CLICK HERE TO VIEW THEIR WEBSITE](#) ➔



ANDY'S NATIONAL 3 PEAKS CHALLENGE

Our designer Andy is taking on the National Three Peaks 24hr Challenge in September to help raise funds for Matthew's Friends. If you would like to help Andy you can visit his page by clicking the link below!

[VISIT ANDY'S JUSTGIVING PAGE](#)



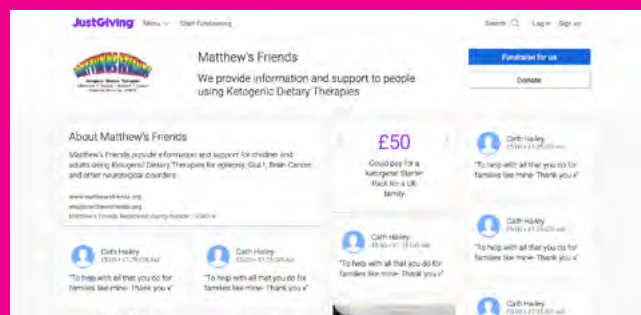
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THANK YOU

A SPECIAL THANK YOU TO OUR REGULAR SUPPORTERS!

Donations received via standing order or via JustGiving really help us to plan ahead with projects; whether it be supporting educational events, funding dietetic services, developing keto recipes or providing free starter packs and resources for families - every penny helps!



[CLICK HERE TO VISIT OUR JUSTGIVING PAGE](#)

PLEASE GET IN TOUCH IF YOU WOULD LIKE TO HELP!

MATTHEW'S FRIENDS COLLECTION POTS

If anyone has a local outlet that would be prepared to have a Matthew's Friends collection pot on their counter, please let us know as they are a wonderful way of collecting spare change. We just ask that you pop into the site every now and then to see how they are filling up and send the proceeds to us.



CHRISTMAS CARDS - AVAILABLE NOW!

Designed exclusively for us by Oxted Artist and Matthew's Friends supporter Melanie Barren, our Christmas cards are now available through our online shop or you can ring the office to place your order.

Packs of 10 cards are priced at £4.50 per pack (plus P&P) with all profits going to help us continue with our work.

[CLICK HERE TO VISIT OUR SHOP AND PURCHASE YOUR CHRISTMAS CARDS! ➡](#)



If you would like to get involved and help us in any way, please contact the Matthew's Friends office on **01342 836571**, or email enq@matthewsfriends.org. Every penny helps us to make the difference to the many families and Ketogenic centres we support. Please help us to continue our work and extend our services through 2023 and beyond, thank you.