



IN THIS ISSUE

EPILEPSY REVIEW FROM GLOBAL SYMPOSIUM BY PROFESSOR ERIC KOSSOFF | [PAGE 2](#)

REVIEW ON THE TREATMENT OF BRAIN TUMOUR AT THE GLOBAL SYMPOSIUM | [PAGE 4](#)

MATTHEW'S FRIENDS SPONSOR NEW ADULT SERVICE IN IRELAND | [PAGE 8](#)



AUTUMN/WINTER NEWSLETTER 2016 • THIRD EDITION

Ketogenic Therapies

Newsletter

5TH Global Symposium success

Welcome to a bumper edition of our newsletter, not only have we combined Autumn and Winter, but because of the Global Symposium that was held in Canada this year, we have had some wonderful contributors who kindly agreed to do some reports on the meeting to share with you, we couldn't possibly cut anything out – so we just included everything in a BIG edition!

The Global Symposium is always something special as it tends to 'recharge' you and you come away feeling even more passionate about our work than before (if that is actually possible).

For me personally it is also a time to catch up with some very dear friends, namely Jim and Nancy Abrahams. Most of us know about the film 'First Do No Harm' starring Meryl Streep, the film that Jim made about the ketogenic diet back in 1997 after the diet cured his son Charlie of his Epilepsy, as well as the foundation they set up 'The Charlie Foundation' in the USA, it was thanks to them that I got to know about the diet for Matthew and the rest as they say, is history.

Whenever Jim and I are on the phone, we still get as mad as ever that the diet is not more readily available for families. so you can imagine what it is like when we actually get together. I can't tell you how much I love these two people – they are a very special part of my journey and part of my inspiration for Matthew's Friends, it is really down to these two people that the interest in the diet stayed alive – we have a lot to thank them for.

I am very proud that Matthew's Friends and The Charlie Foundation work side by side and that our work will carry on.

The Matthew's Friends Canada team did a wonderful job at the Global Symposium with our exhibition stand and their Chef Patron Patrick Wiese, went down a storm with some of his recipes (you have seriously GOT to try the Cheeseburger soup!) and I am looking forward to the Canada team visiting us in June 2017 for KetoCollege.

With 2017 already looking like it is going to be as busy as ever, I want to say a huge thank you to all our supporters and fundraisers that make all this work possible.

As the year draws to a close (a lot faster than most of us would like!) We want to wish you a very happy festive season from all at Matthew's Friends, where ever in the world you may be.

We are going to take a little break over the holiday period – so the main UK office will be shut from 12 noon on the 23rd December and re-opening on Tuesday 3rd January.



The ketogenic support line will be open during this time, however we recommend that you follow the advice of your ketogenic centre for emergency contact in the first instance.

TAKE CARE AND SEE YOU IN 2017

Emma Williams MBE
(Founder and CEO)

MF support line: 07884054811



Ketogenic Dietary Therapies
Information • Training • Research • Support
Registered Charity No. 1108016

CONTACT US...

Editor: Emma Williams MBE

NEWSLETTER ARTICLES:

✉ emma@matthewsfriends.org

FOR RECIPE INFORMATION:

✉ Ketokitchen@matthewsfriends.org

FOR KETOCOLLEGE INFORMATION:

✉ ketocollege@mfclinics.com

✉ Matthew's Friends, St. Piers Lane,
Lingfield, Surrey, RH7 6PW
☎ 01342 836571

🌐 www.matthewsfriends.org

🌐 www.mfclinics.com

twitter 
@matthewsfriends

Find us on:
facebook 

 **MatthewsFriendsOrg**
#ketokitchen

TO HELP FUNDRAISING VISIT:
www.matthewsfriends.org/easy-fundraising/



5TH Global

After 2 years of planning, the 5th Global Symposium on Ketogenic Diet Therapies is now finished and was an enormous success. These meetings are held every two years. The last meeting was in 2014 in Liverpool, England, and before that in 2012 in Chicago.

The 2016 meeting was the largest to date with over 500 neurologists, dietitians, scientists, industry representatives, and parents in attendance from over 40 countries. Held in beautiful Banff, Alberta, Canada, the conference was primarily sponsored by the Charlie Foundation and primary organizer Dr. Jong Rho from Alberta Children's Hospital. It ran from September 20-24, 2016, and details on the full agenda can be found at www.ketoconnect.org.

What Was New at the 2016 Global Symposium

Throughout the meeting, there were lectures, posters, and workshops designed to raise the level of science regarding ketogenic diet therapies and to promote collaborations. Three major themes were very apparent to me as an attendee that distinguished this meeting from the previous one in 2014.



First, there was a large increase in the number of lectures and posters devoted to conditions other than epilepsy for which dietary therapies can be used, including cancer, autism, cognitive disorders, diabetes, and obesity (to name a few). In fact, the equivalent of nearly one full day was spent on these "non-epilepsy" topics.

Second, there were many posters from small, new centers worldwide sharing their experience building ketogenic diet resources in their countries. There were over 100 posters spread out over 2 days (a new record) that clearly demonstrated the worldwide spread of dietary therapies.

Third, there was a virtual explosion in ketogenic diet foods from various vendors and parent support groups including the formula companies. There were also new organizations like Matthews Friends Canada and Quest. It was incredible to taste these amazing foods, some of which were hard to believe were truly ketogenic, but they were! Some photos are included below:



Symposium | September 2016

Highlights of the 2016 Global Symposium

It would be impossible for me to recap here succinctly all of the exciting work being done. However, I will share a few personal highlights of the meetings that you're likely to hear more about in months to years to come:

- Professor Helen Cross shared information about two ongoing studies headed by her group in London. One is called the "KIWE" trial (Ketogenic diet in Infants With Epilepsy) comparing the ketogenic diet versus another anti-seizure drug in children ages 3 to 24 months. A second is called the "edible" trial to see if the ketogenic diet improves outcomes after surgery (by being used beforehand for 6 months) in children with focal cortical malformations of the brain. This second trial is about to start.

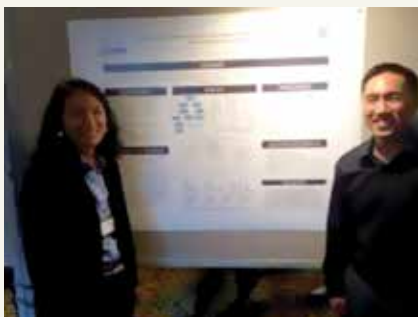


- There were two posters about pregnancy while on the modified Atkins diet for epilepsy. Both women did well as did their babies. This is obviously a hot and important topic.

- Using the ketogenic diet (not just a low carb diet) for both Type 1 and Type 2 diabetes seems to be not only feasible, but very helpful for both diabetes and epilepsy when occurring together.



- There were many posters and discussions about ways to make the start of the ketogenic diet easier for families. These ideas included Child Life involvement, low-carb teaching classes, pre-ketogenic diet admission meetings with families, teaching families to reduce sugars and processed foods before starting the ketogenic diet, and then assessment of cooking abilities.



- A platform research presentation by Dr. Lambrechts from the Netherlands was interesting and generated discussion about her findings of improved mood and behavior in a randomized controlled trial of the ketogenic diet. I think we are likely to see more studies devoted not to just seizure control but also improving cognitive outcomes.
- A randomized trial of a ketogenic diet (MAD plus MCT oil) compared to a control diet is underway in Honolulu, Hawaii. It is being run by Dr. Ryan Lee and dietitian Miki Wong to improve the symptoms of autism. Interim results are encouraging and this trial is ongoing.
- Large numbers of posters and discussions were held about the "extreme" ages of ketogenic diet therapy: infants and adults.
- Several companies are working on apps and desktop computer programs to help families keep track of foods, recipes, ketones, and seizures electronically.



Many thanks to the USA Epilepsy Foundation (epilepsy.com) allowing us to share this article written by Professor Kossoff.

This incredible meeting will be held again October 5-8, 2018, on the island of Jeju off the coast of South Korea. Dr. Heung Dong Kim will be the primary organizer of this meeting and both myself and Emma Williams will also be part of the organising committee. Stay tuned for more details in the next year.

Review on the Treatment of Brain Tumour at the Global symposium

■ Adrienne C. Scheck PhD

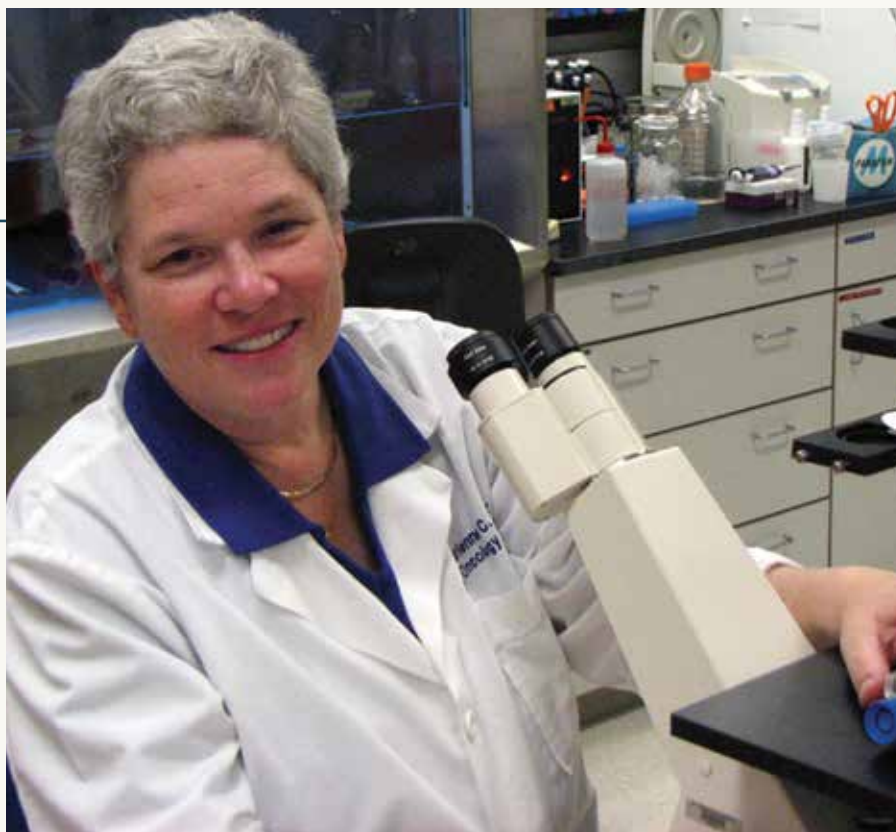
Associate Professor, Brain Tumor Research Center, Barrow Neurological Institute, Phoenix, AZ, USA.

The 5th Global Symposium in Ketogenic therapies continued on the heels of previous meetings with an increased interest in the use of ketogenic therapies for the treatment of brain tumors.

I opened the Thursday morning session with a brief introduction, underscoring that metabolism is now considered a hallmark of cancer and it can be targeted using ketogenic therapies.

In fact, these therapies affect most of the cell alterations that are hallmarks of cancer. We then heard an inspirational talk by Adam Sorenson, a 16 year old diagnosed with glioblastoma at age 13. His father provided a comment that was used to introduce Adam “Adam says sometimes he feels weird about the attention he receives as a cancer survivor. His experience with terminal cancer diagnosis went so well with relatively little impact on his quality of life, compared to the unfortunate stories that most GBM patients have.”

After 2 surgeries to remove the massive tumor, his father, who spoke later in the meeting, used ketogenic therapies as part of his son’s treatment regime along with hyperbaric oxygen, metformin and high dose vitamin C. His MRI scans over the last 3 years have been great! Adam told the attendees how he is still involved in school sports, solves Rubik’s cubes and wishes that everyone with a brain tumor could have it as “easy” as he did.



Dr. Brent Reynolds presented an overview of the evidence addressing the use of the ketogenic diet as a treatment for brain cancer. A large body of evidence exists in preclinical models supporting the safety and efficacy of the ketogenic diet as a treatment to reduce brain tumor cell growth and significantly enhance survival. In the clinical area efficacy trials have yet to be completed and several case reports support the hypothesis that the ketogenic diet may extend survival. However, several early stage clinical investigations have demonstrated the feasibility and safety of the ketogenic diet in patients with brain tumors and other types of cancer.

My talk gave an update on ongoing and completed clinical trials. Comments from the various principal investigators of these trials were

included, and the overall conclusion was that various ketogenic diets are tolerated by brain tumor patients with minimal side effects; however, not all patients are “suited” for this therapy due to their ability to follow the diet, taste changes that occur during treatment, etc.

My talk included thoughts about what is needed to increase compliance and improve our clinical trials data.

After 2 surgeries to remove the massive tumor, his father, who spoke later in the meeting, used ketogenic therapies as part of his son’s treatment regime along with hyperbaric oxygen, metformin and high dose vitamin C.

Leonora Renda, RD expanded on this in her talk describing the use of the ketogenic diet (KD) specifically in the setting of brain tumors. She highlighted the challenges that patients and caregivers can have in the setting of brain surgery, chemotherapy and radiation therapy. These include therapy side effects such as fatigue, nausea, taste changes, loss of appetite, electrolyte changes, etc. There are also confounding effects from steroid use. Her comments were particularly important for the dietitians in the audience that were more familiar with the use of ketogenic therapies for the treatment of epilepsy.

The session ended with a panel discussion with the speakers and moderators. In addition to questions, there was some discussion about what is needed to bring this therapy to cancer patients, and what the challenges are. One challenge that was brought up is the limited number of dietitians trained not only in the ketogenic diet but also in oncology. Another was the availability of pre-made foods, particularly if they can be classified as “medical foods” which allows them to be funded.

In addition to the talks, fifteen abstracts were accepted for presentation on ketogenic therapies (KTs) for brain tumors and one on breast cancer. A few human case reports were presented and they underscored the potential for efficacy and tolerability in cancer patients using the classic KD and the Modified Atkins Diet (MAD), as well as discussing ways to improve ketogenic therapies and factors that affect the decision to use this therapy, particularly in children. In addition, a number of preclinical studies were presented that supported the use of ketogenic therapies for the treatment of cancer and tumor-associated cachexia. The use of a KD in combination with hyperbaric oxygen was shown to be effective for the treatment of a variety of cancers in dogs, based on work showing similar results in a mouse model of metastatic cancer. There were also a variety of presentations that focused on mechanistic questions.

One poster showed that a glioma cell's invasive behavior may be associated with glutamine metabolism, thus suggesting other metabolic targets

for therapy. Another presentation demonstrated that the radio-sensitization caused by the ketone β -hydroxybutyrate may be due to epigenetic changes that alter the expression of DNA repair genes. It was also shown that β -hydroxybutyrate can cause a reduction in the expression of the oncogene MYC, suggesting that this may be a good therapy for medulloblastomas. The utility of the ketone acetoacetate for the inhibition of cancer cell growth was the focus of another presentation at this meeting.

Overall, the scientific presentations demonstrated that the time has come for the more mainstream use of ketogenic therapies in the treatment of cancers. We have begun the journey to understand how these therapies may work and how best to implement them, but we have a long way to go. The overall conclusions and suggestions for future studies included the need for registered dietitians that not only know how to implement ketogenic diet therapies, but also know how to work with cancer patients.

They need to be part of the treatment team right from the start. Preclinical and laboratory studies are providing support for the use of ketogenic diets in combination with other therapies such as gluconeogenesis and glucose inhibitors, angiogenesis inhibitors, immunotherapies, hyperbaric oxygen, vitamin D3 etc.

These combinations have a great deal of promise for the future. More in-depth analyses of why ketogenic therapies work in some, but not all patients is critical, just as it is when new pharmaceuticals are tested. These data will enable us to “tailor” metabolic therapies to individual tumors based on tumor genetics as well as the diagnosis.

On the last day of the meeting Brad Sorenson gave a talk entitled “Keto Dad – What do you do when faced with no options?” It was an excellent overview of why he made the decisions he did for his son's treatment, what challenges he faced with the medical community, exactly what he did and the outcome. It was a wonderful uplifting end to the meeting that underscored the enormous potential of ketogenic therapies for the treatment of cancer.



June saw the publication of the book ‘The Living Well with Cancer Cookbook’ written by our Nutritional Therapist Catherine Zabilowicz. The recipes are by renowned cookery writer Fran Warde and follow a low glycaemic approach whilst including many anticancer foods and no refined sugars or wheat. Some recipes have been marked as suitable for the ketogenic diet.

The book was written in conjunction with ‘Maggie’s’ in order to support their award-winning cancer centres which have been built in the grounds of NHS cancer hospitals within the UK. Catherine has worked as the nutrition advisor at Maggie’s West London since it opened eight years ago but also works for Matthew’s Friends assisting our dietitian in supporting those with brain tumours to implement the ketogenic diet.

The book comes with a wealth of information on how to nourish the body and improve quality of life through diet and lifestyle after a cancer diagnosis. Positive and empowering this fully illustrated guide will help readers through each stage of their cancer journey – particularly during and after treatment – aiming to alleviate anxieties, such as weight loss, fatigue and loss of appetite. It looks at the science behind cancer and discusses those foods which have been found to have anticancer properties, giving ideas on how to include these in the diet through the many tasty, comforting recipes.

The Living Well With Cancer Cookbook is published in support of ‘Maggie’s’ charity (with all royalties donated to Maggie’s). Available in paperback and ebook from 16th June.

Order your copy here - <https://www.amazon.co.uk/Living-Well-Cancer-Cookbook-essential/dp/0593075757>

Glut 1 Review from the Global Ketogenic Dietary Therapies, Symposium, Banff, Alberta, Canada



■ Dr Archana Desurkar

Consultant Paediatric Neurologist, Sheffield Children's Hospital & Matthew's Friends Glut 1D Clinics

This 5th biennial conference, Global Ketogenic Diet Therapies symposium had something for everyone with an array of topics covered from eminent speakers.

These ranged from the history of the dietary therapies over almost a century to insight into the mechanisms of Ketogenic therapy, wider emerging applications beyond epilepsy such as developmental disorders as in autism, psychiatric indications in addition to ontological therapy.

In relation to GLUT1 deficiency, the talk of most interest was of Professor Pascual relating to anaplerosis in GLUT1.

Classical phenotype of GLUT1 is now well recognised but it is also clear that epilepsy phenotype is widening to include early onset childhood absence epilepsy, myoclonic astatic epilepsy, and adult onset refractory focal epilepsy. Movement disorders with or without epilepsy are also increasingly recognised that take the form of spastic ataxia, paroxysmal exertion related dystonia (DYT18) as well as paroxysmal choreoathetosis (DYT 9), tremors and episodic ataxia.

Typical evolution of classical GLUT1 evolves from infantile onset abnormal eye movements; seizures appearing in the latter half of infancy (absences, fragmentary seizures and occasional convulsive seizures) to emerging movement disorder in the second year of life. Children have strength in their social skills and overall, the disorder stabilises by puberty.

Ketogenic diet therapy is the treatment of choice as it bypasses the metabolic block in the supply of glucose by providing Acetyl CoA to fuel energy cycle. (Citric acid cycle, a mechanism by which energy is synthesized)

Functional imaging such as F-MRI (functional MRI) alongside EEG in GLUT1 reveals activation of visual and sensorimotor areas during a seizure along with suppression of prefrontal cortex activities. It is also recognised that PET imaging in GLUT1 patients demonstrates characteristic pattern of hypometabolism (low glucose uptake) in basal ganglia and thalami. Animal studies also demonstrate decreased synaptic currents in neurons that are dependent on glucose supply. Similarly, there is decreased cortical inhibition. This leads to consideration if this cortical inhibition could be enhanced by precursors of acetyl CoA.

Our metabolism has three components such as anabolism, catabolism and anaplerosis. . Anaplerosis means replenishment of depleted intermediary metabolic components. Acetyl CoA that is the entry point of citric acid cycle (and normally generated by glycolysis) is a two carbon atom molecule that will generate a molecule of ATP, a currency of measuring energy generation. Ketogenic diet provided acetyl CoA thus fuelling citric acid cycle. This is a catabolic process.

Triheptanoin (or C7), being an odd carbon item compound (7 carbon atoms) has the potential to offer anaplerosis by fuelling the energy cycle with 2 carbon atom AcetylCoA and also 3 carbon atom Propionyl CoA.

Clinical studies evaluating the use of either 35 or 45% Triheptanoin in 11 Glut1 patients, not receiving ketogenic diet therapy has demonstrated significant reduction in the frequency and severity of seizures.

There is also emerging evidence of the benefit of modified ketogenic diet (MKD) therapy demonstrating benefit in GLUT1 though typically classical KD is the favoured option to provide adequate level of ketosis as the energy substrate. Literature over the last several years demonstrates improvement in seizures, movement disorder as well as cognition with MKD. (Ito et al 201; Leen et al, 2013 and Haberlandt et al, 2014).

A study based on questionnaires to the families with GLUT1, involving 90 patients, (Kass et al, 2016) identified no difference in seizure freedom with classical KD vs MKD. Another recent study of 10 GLUT1 patients (Amoulou, 2016) treated with MKD demonstrated seizure improvement in all 7 patients and control of movement disorders in all 3. Thus, this may prove to be a useful option given the long term need to maintain ketogenic therapy in GLUT1 patients.

Thus; understanding of functional neuronal changes in GLUT1 may help guiding therapy with emerging evidence of benefit from Triheptanoin which still needs to undergo further evaluation. However, there is also emerging evidence of modified ketogenic therapies offering meaningful benefit and this will certainly help in compliance to ketogenic therapy which should be continued long term in this condition.

As patient observations derive clinical research questions, it is important for the families to consider participating in G1D registry, the link for which can be found on the Matthew's Friends website or go directly to www.G1registry.org

1st European Glut 1 Conference, Milan – 7th/8th October 2016

Matthew's Friends were delighted to be co-organisers for this event together with the Glut 1 Italy organisation.

The meeting proved to be very informative with a busy two day programme for both professionals and families, who came from all areas of Europe. Over 183 people attended, with a variety of topics being discussed, thankfully with translation services also available to delegates.

Most of the presentations can be found via the Glut 1 Italy website and you can view the slides that were presented at the following link: www.glut1.it/?page_id=776. A HUGE congratulations to Massimiliano Barone and his team at Glut 1 Italy for putting on a fantastic meeting.

Whilst in Milan the organising committee decided that this would become a biennial meeting and we have agreed that Matthew's Friends Glut 1 UK will host the 2nd Glut 1 European Conference in Birmingham in 2018.



So keep checking our website for further details or sign up to our mailing list via Glut1uk@matthewsfriends.org



Matthew's Friends sponsor new Adult Service in Ireland..

This will not only benefit adults that are desperately wanting to try ketogenic therapy for their drug resistant epilepsy, but will also free up more places in the paediatric services as they will now be able to transition their patients across to St. James's that are already on ketogenic therapy.

As a Matthew's Friends supported service, this means that not only is funding put into place for the service, but also training is provided for the dietitians as well as ongoing mentoring. All start up dietary information and booklets are provided, as well as the usual starter packs and ketogenic samples for the families.

The centre is also looking at being involved in future research projects and we will make regular visits to the centre in order to make sure that everything possible is being done to make this a very successful Adult Ketogenic Centre for Ireland. We are very much looking forward to working with and supporting the team at St. James's and I am delighted to introduce you to their team...



Ketogenic Dietary Therapies

Information • Training • Research • Support

Registered Charity No. 1108016

■ Dr Colin Doherty

Consultant Neurologist, St James Hospital.

On behalf of the National Epilepsy Care Programme and in my role as National Clinical Lead and director of the Regional Epilepsy Services at St James's hospital in Dublin, I am delighted to announce the appointment of Ms Laura Healy (BSc Hum Nut & Diet, PhD) as specialist dietitian in dietary treatments for epilepsy.

This long awaited appointment is set to energise the treatment of adults with epilepsy who have the potential to be responsive to dietary manipulation such as the Ketogenic, Modified Atkins and Low Glycaemic Index diets. Historically only paediatric patients were offered this therapy and had to enter the adult services without specialist care for their diet.

The job has been sponsored for the first two years by Matthew's Friends without whom the role would not have materialised. We are eternally grateful to Matthew's Friends and to Emma Williams in particular for the generous support not just financially but spiritually during the prolonged process of partnering with St James's and the Health Services in Ireland.

This role is envisaged as a national one and we will be inviting other epilepsy centres to consider referrals for dietary treatment. We are also excited by the development of joint educational programmes for dietary treatment with Matthew's Friends over the next few years.



■ Laura Healy

Senior Dietitian, St James Hospital.

BSc (Hons) Human Nutrition and Dietetics (DIT/TCD), Dip Stats (TCD), PhD (TCD)

Laura is a Senior Dietitian with over 13 years' experience working in various clinical areas providing an inpatient and outpatient dietetic service and has over 10 years' experience in clinical dietetic research. Laura began her research career in St James Hospital in 2005 and completed her PhD in 2010 focusing on nutrition and cancer. She has widely published and presented at numerous national and international conferences.

In recognition of her work, Laura was awarded the INDI Research Dietitian of the Year in 2011. Recently, she was the lead investigator on a prospective randomised double blinded placebo controlled multi-centre trial in oesophageal cancer patients.

Laura enjoys new challenges and is delighted to be involved in the setting up of the first adult service for medical ketogenic dietary therapies in Ireland, supported by Matthew's Friends. It's fantastic that these specialist ketogenic dietary therapies will now be available to adults with epilepsy, especially those transitioning from paediatric services.

Laura is passionate about research and hopes to add to the evidence base on ketogenic diets for epilepsy treatment in adults and provide a high-quality service reflecting the interests, values, needs, and choices of the patients and families we serve.



■ Ann-Marie Walsh

Acting Senior Dietitian, St James's Hospital

Bsc (Hons) Human Nutrition and Dietetics (DIT/TCD)

Ann-Marie is a dietitian with 4 years' experience. Much of Ann-Marie's career has been focused in the acute care setting. In the Mercy University Hospital Cork Ann-Marie covered a number of specialities including General medicine, Medicine for the elderly and CCU. Since 2013 she has been employed by St. James's Hospital Dublin and has worked in a wide range of areas including Rheumatology; Endocrinology; Vascular, General, Upper gastrointestinal and Colorectal surgery; The High Dependency Unit and Neurology. Ann-Marie enjoys working with patients and their families and carers in both the in- and outpatient setting.

During her work in the area of Neurology Ann-Marie became interested in the use of the ketogenic diet for patients with refractory epilepsy. She has recently been appointed as acting Senior dietitian covering a maternity leave in the area of Ketogenic diet therapy for adults in St. James's Hospital. Ann-Marie is delighted to play a role in the setting up of the first adult service for medical ketogenic dietary therapies in Ireland with the support of Matthew's Friends. She looks forward to developing a high quality, patient centred service which will make the ketogenic diet available to adults with epilepsy, including those transitioning from paediatric services.

Ann-Marie has also completed further training in the areas of behaviour change, group facilitation and clinical audit and looks forward to applying these skills to her new position.



SEASONAL RECIPES

It is that time of year which can send usually happy keto kids and adults into a state of panic.... THE FESTIVE SEASON! Every which way you turn there is food, the TV seems to show nothing but back to back cooking programmes and if you don't want to cook it, the adverts tell you where you can buy it.

You can't seem to visit anyone without having a mince pie waved in front of your face and even the shops seem to have tins of sweets opened at the counters to just 'help yourself' – seriously, it is enough to drive the most resilient of people completely screwy!

Hopefully we can help, our ketocook Mo, has come up with some great keto Christmas recipes which can be found on our website.

We have included a selection of recipes here which might be useful over the holidays – If you want to see how to make the Christmas cake then make sure you check out our You Tube Ketocooking channel which you can access through our website at www.matthewsfriends.org.

To 'Ask Mo' then please email:
ketokitchen@matthewsfriends.org

FAMILY SIZE CHRISTMAS CAKE

INGREDIENTS

- 150g Almond flour flurry - HOLLAND & BARRETT
- 300g Egg
- 25g Raisins
- 25g Sultanas
- 19g Coconut flour - TIANA
- 180g Butter
- 10g Psyllium husk - TELEPHONE BRAND SAT-ISABGOL
- 1g Orange zest
- 44g Prunes - canned in juice
- 100g Granular sweetener
- 100g SUKRIN or NATVIA icing
- You will also need 1 teaspoon of mixed spice, 1 teaspoon of BARKAT baking powder and a few drops of orange extract.

METHOD

- Pre heat oven to 170c / fan 150c / gas 4
- Start by chopping the sultanas, prunes and raisins, a bit fiddly but you get a better distribution through the cake, then soak them in 30mls of the prune juice for at least ½ hour to plump them up.
- Mix together the almond flour, coconut flour with the Barkat and mixed spice.
- Soften the butter, stir in the granulated sweetener and then the flour mixture.
- Whisk the egg until light and frothy, stir in to the mixture and combine well.
- Stir in the soaked fruit and orange zest.
- Place in a greased and lined 7 inch cake tin or silicone mould.
- Cook for approximately 40 minutes until cooked through.
- When it is cold, make icing by mixing the Natvia / Sukrin icing with just enough water and a few drops of orange extract to make a stiffish icing.

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

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



MKD: 59.04g CHO
FAT: 280.72g
PROTEIN: 74.90g
KCAL: 3062

MO'S TIPS

Decorate how you like; there are lots of lovely items available that make it Christmassy without adding to the ratio. not really fruity cake but just enough to make it a bit different!!

If you cut in to 12 portions, this will give you 5g CHO per portion.



PORK PIE

INGREDIENTS

- 14g Egg
- 23g Almond flour flurry - HOLLAND & BARRETT
- 8g Double cream - MORRISONS
- 5g Psyllium husk - TELEPHONE BRAND SAT-ISABGOL
- 50g Galbani mozzarella - MORRISONS
- 66g Pork mince
- You will also need ¼ teaspoon dried sage, some salt and black pepper.

METHOD

- Pre heat oven to 180c / fan 160c / gas 5
- Season the pork with sage, salt and pepper and set to one side.
- Melt the mozzarella in the microwave for 20 seconds, stir then zap again for a further 20 seconds.
- Beat in the egg, almond flour flurry, psyllium husk, pinch of salt and cream, mix until it forms a dough.
- Cut off enough to form a lid (approximately 1/3). Roll the larger piece between parchment paper in to a round to fit a large muffin mould, make sure there are no cracks!!
- Place pork in the mould and push in firmly. Brush the top of the meat with a little beaten egg.
- Roll out the lid and place on top, sealing round the edges firmly.
- Cook in pre heated oven for 25-30 minutes until golden brown.
- Leave to cool for 10 minutes and then unmould carefully.



MKD: 2.78g CHO
FAT: 51.63g
PROTEIN: 28.36g
KCAL: 589

MO'S TIPS

This recipe allows enough carb to serve it with a little piccalilli or some salad. Remember to add it though!! Pork mince does vary in fat content so you will need to check the label of the brand you choose. Some are very lean and low fat, protein can also vary a bit!!



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

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

BREAD ROLLS

INGREDIENTS

- 160g Almond flour flurry - HOLLAND & BARRETT
- 110g Egg white
- 25g Psyllium husk
- You will also need 1 teaspoon of salt, 2 teaspoons of BARKAT baking powder, 190g boiling water and 15g white wine vinegar.

METHOD

- Pre heat oven to 180c / fan 160c / gas 5.
- Mix the almond flour flurry with the psyllium husks, baking powder and salt.
- Add the egg white and vinegar, mix well.
- Pour in the BOILING water and mix until a dough forms.
- Divide into 6 equal portions and then shape in to bread rolls. If you dampen your hand with water this will help with the shaping.
- Brush with a little beaten egg yolk and bake in pre heated oven for approximately 40 minutes until cooked through.
- Leave to cool on a wire rack.

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

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



CLASSICAL: 1.59 RATIO

FAT: 89.60g

PROTEIN: 45.48g

CHO: 11.04g

KCAL: 1032

MO'S TIPS

If you can't get the almond flour flurry, you could use ground almonds, but sieve them first before weighing. You will need enough to replace what doesn't pass through the sieve. The fat content will be less than the flour flurry but protein and carb is the same.

Each roll is: 14.9g fat / 7.2g protein / 1.8g CHO.



CHRISTMAS BISCUITS

INGREDIENTS

- 18g Butter
- 27g Almond flour flurry - HOLLAND & BARRETT
- 3g Plain flour - McDOUGALLS
- You will also need some sweetener of your choice. I find granules or powder good for biscuits I used 12g of NATVIA icing, a pinch of mixed spice or cinnamon, or if preferred a few drops of any flavour extract (optional).

METHOD

- Pre heat oven to 170c / fan 150c / gas 3 or 4.
- Soften the butter and mix in the almond flurry, flour, sweetener and flavouring.
- Shape the dough to your own design but something seasonal like Christmas trees or stars looks nice.
- Cook for approximately 10 minutes depending on the size.
- When cold you can decorate using NATVIA or SUKRIN icing with a little colouring, or if you need more fat in you can make some butter icing with unsalted butter and NATVIA / SUKRIN icing.

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

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



2.95:1 RATIO
CHO: 4.07g
FAT: 29.96g
PROTEIN: 6.09g
KCAL: 310



MO'S TIPS

I used a cookie shaper to make mine (pictured above), it was easy to use.

These are very useful for special treats of snacks.

I made 10 cookies, each one gives: 3g fat / 0.6g protein / 0.4g CHO



CHOCOLATE CHRISTMAS CAKE

INGREDIENTS

- 30g Butter
- 75g Almond flour flurry – HOLLAND & BARRETT
- 5g Cocoa – BOURNVILLE
- 75g Eggs
- 37g Raspberries
- 75g Mascarpone – MORRISONS
- 4g Psyllium husk – TELEPHONE BRAND SAT-ISABGOL
- You will also need 2g BARKAT baking powder, 30g water with 1g white vinegar and 20g sweetener – NATVIA, TRUVIA or SUKRIN powder or granules and a few drops of vanilla extract.

METHOD

- Pre heat oven to 180c / fan 160c / gas 4.
- Reserve the mascarpone for the topping, chop the raspberries and keep to one side.
- Blend ALL remaining ingredients with a hand blender until the mixture is light and fluffy; gently stir in the chopped raspberries.
- Place in a small cake tin (shape of your choice) and cook for approximately 15 -20 minutes until risen and firm.
- When it is cold and ready to serve beat the mascarpone until smooth, you can flavour it if you like but it has a lovely taste of its own. Spread over the top of the cake and decorate with appropriate Christmas figures and a light dusting of cocoa powder.

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

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



2.48:1 RATIO
FAT: 104.82g
PROTEIN: 31.16g
CHO: 11.18g CHO
KCAL: 1113

MO'S TIPS

This will keep in the fridge for 3 days. You can make the cake ahead and freeze without the topping! I used frozen raspberries (defrosted), you could use other fruits but would need to recalculate.

I cooked in a 7 inch ring mould which made it easy to slice into 10 portions.

Each portion gives: 10.5g fat / 3.1g protein / 1.1g CHO



Christmas is coming

With Christmas on our doorstep, the Matthew's Friends team are always on the lookout for handy items and tips to help out and make being on a Ketogenic Diet that little bit easier for our children!

Our first recommendation is this Moo Free advent calendar, we purchased at Sainsbury's for under £5! They are also available at other outlets and online. The box contains 24 organic confectionery treats made from a combination of cocoa, sugar and rice. They are dairy free, lactose free, gluten free, wheat free, casein free, soya free, vegetarian and vegan.

EACH PIECE (SERVING SIZE 4.2G) GIVES FAT 1.7G, CARBS 2.3G, PROTEIN 0.1G

Via our recent Facebook draw, Matthew's Friends have supplied a FREE Moo Free calendar to Freya, Hope, Chloe, Isobel, Spud, Emily Rose, Archie, Parys, Katelyn, Zak, Sienna and Matthew, who are all children on a Ketogenic diet for epilepsy in the UK!



Another find, perhaps more suitable for older children and adults is this great pork crackling advent calendar from the Snaffling Pig Company. These are worth searching for online at around £13 + P&P

As always, please consult your Ketogenic dietitian before making any changes or adding any new products when on a prescribed Ketogenic therapy.
Happy Christmas!





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.

<http://www.matthewsfriends.org/matthews-friends-shop/>

KETOGENIC FOODS – UNDER THE MF SPOTLIGHT!



We at Matthew's Friends do get some of the best jobs at times which does include tasting possible ketogenic foods and products and seeing what we can do with them. Our ketokitchen has been full of chocolate puddings these past few weeks and we have featured 2 of them here.

Not only do we want them to taste good but we also look at how versatile they can be, the ingredients used to make them, the availability and cost for the families. The first one is a NEW ketogenic food available from Vitaflo®, called keyo®.

KEYO

Keyo is a ready to eat complete food. It has 30g of fat, 8g protein and only 2g of carbohydrate per pot with a comprehensive micronutrient profile. Due to the high fat and low carbohydrate content this product can be used in all versions of the ketogenic diet effectively. It's also a low volume food, so very suitable for those who don't actually like to eat very much.

It has a semi-solid texture and a really nice chocolate flavour (the team tend to lean towards a 'nutella' type of flavour!) This one is only available on prescription, so no cost to the families, you would just need to speak to your dietitian about getting it prescribed. Keyo is also particularly useful to travel with and take out and about, as well as any of those unfortunate overnight stays in hospital as it can be used as a complete keto meal if needed. The feedback so far from the families that have tried it, has been extremely positive



Only available on
prescription

DARK CHOCOLATE ORANGE

This is a dark chocolate orange flavoured pudding and is available to order online. It comes in 115g individual portions and costs £2.49p per pot. Per 100g it has 13.8g fat, 4.7g carbohydrate and 1.8g protein.

This is NOT a complete meal and because of the higher carbohydrate content of this one, we found it best to use half a pot at a time. However, because of the stronger flavour, we also found that we can lose more MCT in this product without tasting it – so it did prove particularly useful in this area.

Available from The Natural Low Carb Store www.natural-low-carb-store.co.uk



SUMMARY

Both products are extremely versatile and can be calculated into recipes as an ingredient (depending on your prescription). Here are a few ways to try them:

- Either on their own or adding more cream/oil and freezing to make more of an ice cream.
- Adding coconut oil/butter, putting in ice cube trays and setting them to make 'fat bombs'
- Or adding coconut oil/butter and NOT allowing to set too hard (but more of a spreadable consistency) and using like a 'chocolate spread' - especially good if used on Mo's Bread rolls or as a chocolate icing.
- Thinning them down with either oil or cream to make a chocolate sauce, served warm or cold.

COMING SOON: KETOPLANNER

A new resource to help create and share
ketogenic recipes

MOBILE
AND TABLET
RESPONSIVE

ONLY
AVAILABLE WITH
APPROVAL FROM
A HCP

www.nutricia.co.uk

 **NUTRICIA**
Metabolics
Inspiring Futures

Keto kids busy Down Under

It has been another busy few months Down Under, with our 'keto kids' continuing to grow in number.

Our first South Island keto-clinic is now fully operational in Christchurch, complementing the existing programmes at Auckland and Wellington hospitals.

Our new families are now receiving Starter Packs to help them begin their journey, which include digital scales, some useful cooking equipment, and the very popular 'Dinner Winner' plates.

Our brochures are also in the process of being published to assist families, along with a booklet designed to help schools support children undergoing dietary therapy.



Christmas approaching means the long awaited Summer months are also nearly here in the Southern Hemisphere, we hope everybody has a safe and enjoyable break over the festive season.

Susan Hill, President,
Matthews Friends NZ



At Matthew's Friends, we know and understand how vital 'support' is when on a prescribed Ketogenic Dietary Therapy. We want to recognise not only the patients, be they children or adults, but also those around them that contribute so much and can make the difference between success and failure.

This is your opportunity to say 'Thank You' to a special person or family member, group, school, hospice. Perhaps a certain restaurant or hotel has gone that 'extra mile' that has helped your family eat/holiday together happily?

**Visit matthewsfriends.org
AND NOMINATE YOUR KETOSTAR!**



GET READY FOR PURPLE DAY!

MARCH 26TH IS PURPLE DAY AROUND THE GLOBE, RAISING AWARENESS OF EPILEPSY

Here at Matthew's Friends we have been Partners of Purpleday.org, since Cassidy Megan created her vision in 2008. If you would like to support us this Purple Day, please visit the Keto Fundraising section of our website.

We have special resources for Purple Day, including downloadable posters and items in our Shop to make your Purple Day event extra special!

Matthew's Friends Canada growing connections



Matthew's Friends Canada (MFC)– continues at a steady and careful pace growing its connections with organizations, families and health care professionals across the country.



Here is an overview of our activities:

On September 16-18, 2016 – Matthew's Friends Canada were co-organizers with its first ever Family Retreat in Ontario. Keeping central to our goal – we were able to offer our epilepsy families an opportunity to get together, join in some outdoor fun, and learn more about ketogenic diet therapy. With nearly 90 attendees registered – we were proud to organize an entire day of this retreat to learning about ketogenic diet therapy from various speakers. Ketogenic registered dietitian (Jennifer Fabe) and epileptologist (Dr. Bercovici) provided overview of the therapy and describing how clinicians screen potential candidates for therapy.

Implementing the ketogenic diet can be challenging and this was also highlighted by the engaging presentations of our social worker Carol Pereira and author Betty Franklin. But nothing was more compelling than hearing the testimonials of the ketogenic diet families including our very own founder Emma Williams. The intimate day-to-day journey of a child, adult and family resonated honest reflections of the amazing impact of the ketogenic diet but also its challenges.

Practical & delicious recipes were presented with culinary savviness by two amazing chefs: Chef Neil (guest chef from the U.K) and Chef Patrick (chef patron to Matthew's Friends Canada). With children scurrying around and eager to join in the cooking demonstrations – both chefs prepared fantastic recipes.

Overall this day was an amazing success and was made possible with partnerships with Epilepsy of South Central Ontario as well as our vendors: VitaFlo, Nutricia and Shaklee. Thank you!

After this amazing event – Matthew's Friends Canada debuted onto the global scene at the 5th Global Symposium on Ketogenic Dietary Therapies in Banff, AB. Experts from around the world gathered to learn from each other. MFC was ready to share some of the Canadian education tools, new Canadian ketogenic diet recipes created in part by Chef Patrick Wiese, foster & strengthen connections with the Canadian ketogenic diet professionals and work with the global teams on delivering new knowledge and products to the ketogenic diet families we serve.

Other excellent MFC highlights of 2016 include:

- Profiled on the TV Show 'We Mean Business' which can be viewed in this link: <https://goo.gl/nc1dPT>
- Invitation to speak at the Quebec Metabolic Dietitian Conference in Montreal, QC, as well as other epilepsy organizations and companies.
- Fundraising - we had a team run in the Scotiabank Bank Marathon and Chef Patron Patrick Wiese continues to host Intimate Dining Events – which have been a sold out success! Thank you again to all for your support!

COMING UP:

- Canadian ketogenic diet education tools have now been translated into French and shall be uploaded onto the Matthew's Friends website soon.
- Research study that will survey the Canadian ketogenic diet health professionals to help characterize the current practice in Canada. Stay tuned! Thank you to our University of Toronto graduate students (Alex and Samar) for supporting this project.
- Ketogenic Diet Family events in 2017



We are grateful for the support of our ketogenic diet community, epilepsy organizations, Matthew's Friends Global, local businesses as well as Cambrooke Therapeutics, VitaFlo and Nutricia. Many thanks for your unwavering support and we look forward to continuing to work with you again in 2017!

Remember to Visit us at

 Matthews Friends Canada

 MF_Canada

**Merry Christmas from the
Matthew's Friends Canada Team!**

**New to Ketogenic therapy? Or needing a refresher course
and an opportunity to network with other Ketogenic teams?**

**MATTHEW'S FRIENDS WILL BE HOSTING
THE ANNUAL KETOCOLLEGE PROGRAMME**

27TH – 29TH JUNE 2017

FELBRIDGE HOTEL, EAST GRINSTEAD, SURREY, UK

ADDITIONAL DAY INCLUDED - MEDICAL KETOGENIC MASTERCLASS

LEAD MENTOR & COURSE CHAIR



Professor J. Helen Cross OBE
The Prince of Wales's Chair of
Childhood Epilepsy,
UCL-Institute of Child Health,
Great Ormond Street Hospital for
Children and Young Epilepsy.

SPECIAL GUEST MENTOR



Eric Kossoff, M.D.
Professor, Neurology
and Paediatrics
Johns Hopkins Hospital,
Baltimore.

SPECIAL GUEST MENTOR



Mackenzie Cervenka M.D.
Associate Professor
of Neurology
Johns Hopkins Hospital,
Baltimore.



For further details please visit www.mfclinics.com
or to register your interest please email: ketocollege@mfclinics.com

Matthew's Friends Halloween Ball!

The iconic setting of Lingfield Park Racecourse was the fabulous venue for the main event in Matthew's Friends fundraiser 2016 calendar.

160 guests came together to celebrate the 12th anniversary of our unique charity, with everyone entering in to the spirit of Halloween, dressing up as their favourite celebrity or character. Matthew's Friends Ambassador Chris Oxlade, as always, hosted the Ball with his renowned flair, introducing guest speakers; Medical Board Chair, Professor Helen Cross OBE, who updated the audience on the work of Matthew's Friends and the exciting field of Medical Ketogenic Therapies and the charity Founding Patron, Celebrity TV chef Tony Tobin, regaling all with the amazing fundraising endeavours of the charity supporters over the past year.



Red Goat Productions produced a beautifully insightful short film that summed up Matthew and the work of the charity, this can now be seen on the Matthew's Friends Org YouTube channel.

Guests included kind sponsors of the evening, Nutricia and Vitaflo, as well as Ketogenic dietitians from Great Ormond Street and Birmingham Children's Hospitals. Ketogenic family members partied the night away, along with the Matthew's Friends team and supporters of the charity from across the UK.

One of the major highlights of the evening was the announcement from Tony on behalf of parents Russ and Suzanna, whose daughter Ellen is on the Ketogenic Diet for her epilepsy at St George's Hospital London. Russ works for GlaxoSmithKline in Worthing Sussex and nominated Matthew's Friends to receive a grant, "A donation to a cause which has a very personal link to someone working on the Worthing site". We are amazed and delighted to receive £20,000 towards our continued support of families! Russ said: "The impact that GSK's donation will have on other families is so warming and to be part of that is a sense of pride." We are indebted to Russ and Suzanna for their heartfelt support of our charity.

A raffle and auction of wonderful prizes helped bring the total raised, including the GSK donation, to a fantastic £28,413.88

A huge thank you to all those who donated raffle and auction prizes and all those who attended, we really appreciate all your support.

Please save the date Saturday 16th September 2017 and look out for announcements of our next Matthew's Friends Rainbow Ball!



Matthew's Mum and Matthew's Friends Founder Emma Williams MBE took to the stage with Matthew's sister, student doctor, Alice, to give an insight into how the Ketogenic Diet changed Matthew's and all their lives, resulting in the realisation of Emma's dream - Matthew's Friends charity to support families and professionals around the globe.



Our fabulous Patron,
Mr Tony Tobin!



Fundraising for Matthew's Friends

We are so grateful to ALL our fundraisers! 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 have had an amazing Summer of events, with the support of many individuals and groups raising much-needed funds for us. Please visit the Keto Fundraising section of our website to find out more about what's been happening around the UK!

Here are just a few of the incredible people that have raised funds for us...



Kate came in 1st for the ladies in the London to Brighton cycle race!



Harry's Dad Tom completed the Royal Parks Half marathon to raise funds for our Glut1UK fund!



Young Epilepsy student Greg took on a gruelling triathlon!



David Doe and Peter Green ran the Royal Parks Half marathon for Papyrus and Matthew's Friends!



Ava's Dad Richard ran the Norwich 10k to raise funds for MFGlut1UK!



Sinead ran her 1st ever marathon, inspired by her little girl Ruby!



Denise Dyer ran the Kent Road Runner marathon!



Billy's Mum Michelle took on a Sprint triathlon and Billy's cousin Kathryn ran the Cardiff ½ Marathon for MFGlut1UK!



Ben and his family ran together at The Great Scottish Run in Glasgow!



The "Diamond Geezers" drove their £300 car in the Monte Carlo or Bust rally!



Shenise was our first ever wing-walker, a fearless awesome lady!

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 2017 and beyond, thank you.