JAN/FEB 2019

READ THE NUTRITION I-MAG AND REGISTER YOUR SELF-DIRECTED CPD CREDITS

BANT

WWW.NUTRITIONIMAG.COM

RESEARCH AND EDUCATION FOR TOMORROW'S PRACTITIONER

I-Mag

THE CLEANSE EFFECT

The correct approach when it comes to detoxification MALE RULES

A guide to modernday male health

ECZEMA ACTION

The role of nutrition in dealing with this skin condition





Water Soluble MAGNESIUM CITRATE with Disaporal® Delivery System for Optimised Delivery



MAGNESIUM MANUAL Mg

MAGNESIUM MANUAL

This book provides comprehensive and researched information on magnesium deficiency: prevalence, diagnosis and causes.

This book covers: - guidelines for magnesium supplementation - outlines the evidence behind the bioavailability of the different forms of magnesium.

it is a valuable resource for clinicians to understand the benefits of magnesium in health.

Download your complimentary copy today at: www.biopractica.co.uk



In partnership with:













Welcome



hat a year it has been in the world of nutrition, one packed full of education, with some great innovation when it comes to nutritional supplements, and one where we have celebrated the achievements of students in various ways.

As this issue brings 2018 to a close, we are delighted to be able to reveal the winner of the inaugural *Nutrition I-Mag* Student Award. Sponsored by Nutri Advanced, we were delighted to be able to give back to one

student who has shown excellence in her studies and who has gone above and beyond in her work.

The winner was named as Helen Fletcher, and we were delighted, along with Nutri Advanced, to be able to present her with her award at the recent IHCAN Conference, and we look forward to seeing more of Helen's journey. Look out for further updates on the awards in early 2019. Also this year, we were pleased to bring back the *Nutrition I-Mag* Mentoring Scheme, in which we offer one student the opportunity to have their writing published. This is important for us as a magazine that is dedicated to supporting and developing students in the world of nutritional therapy and we are excited to continue on this path; don't forget that *Nutrition I-Mag* is available to read at www.nutritionimag.com, as well as being distributed by all the leading colleges in the UK, along with via The Natural Dispensary. And as an added bonus, this magazine is CPD accredited, meaning you can continue to build your points by reading it every other month.

And finally, the dates for the IHCAN Conference series 2019 have now been released, as well as the themes. Don't delay in booking your place as the success of opening the conference booking line has resulted in 400 bookings for the series being made in the last week alone. Visit www.ihcanconferences. co.uk to find out more and book, and we look forward to seeing you there.

achel

RACHEL SYMONDS, EDITOR

Some material may be speculative and/or not in agreement with current medical practice. Information in Nutrition I-mag is provided for professional education and debate and is not intended to be used by non-medically qualified readers as a substitute for, or basis of, medical treatment. Copyright of articles remains with individual authors All rights reserved. No article may be reproduced in any form, printed or electronically, without wriiten consent of the author and publisher. Copying for use in education or marketing requires permission of the author and publisher and is prohibited without that permission. Articles may not be scanned for use on personal or commercial websites or CD-ROMs. Published by Target Publishing Limited. The Publishers cannot accept any responsibility for the advertisements in this publication

target publishing

NUTRITION I-MAG, Target Publishing Limited, The Old Dairy, Hudsons Farm, Fieldgate Lane, Ugley Green, Bishops Stortford CM22 6HJ

t: 01279 816300 e: info@targetpublishing.com www.nutritionimag.com

Meet The Team

BANT

fntp

EDITOR Rachel Symonds CONTRIBUTORS Katherine Pardo, Sue McGarrigle, Rose Holmes SALES DIRECTOR Ruth Gilmour e: ruth.gilmour@targetpublishing.com GROUP SALES MANAGER Abigail Morris e: abigail.morris@targetpublishing.com SENIOR SALES EXECUTIVE Maria Francis e: maria.francis@targetpublishing.com DESIGN/PRODUCTION Chris Kemp e: chris.kemp@targetpublishing.com MARKETING EXECUTIVE Lauren Ashby e: lauren.ashby@targetpublishing.com MARKETING DIRECTOR James Rix e: james.rix@targetpublishing.com ACCOUNTS Lorraine Evans e: accounts@targetpublishing.com MANAGING DIRECTOR David Cann e: info@targetpublishing.com

Natural Healthcare College

The Nutrition I-Mag is published by Target Publishing Limited, the leading publisher and conference organiser serving the natural, complementary health markets, as well as the leisure, education, sport and eco markets. www.targetpublishing.com ISSN 2049-4017

www.nutritionimag.com

CONTENTS



EDUCATION We reveal the first round of speakers for the 2019 IHCAN Conference series



RECIPES Vegan goodness for all



COMPANY PROFILE The benefits of studying with the Institute for Optimum Nutrition



HEALTHY CLEANSE Guide your clients through a healthy new year detox



MALE HEALTH Nutrition experts discuss the best approach to addressing men's health needs



ECZEMA FOCUS An update on the nutritional link with this prevalent skin condition

NEWS

The latest developments in the world of nutrition

RESEARCH

We bring you up to date with the latest scientific developments

PRODUCT WATCH What's new to market

BANT All the news from the leading professional body

ASK THE EXPERTS Nutritional experts answer your questions

INGREDIENT FOCUS The latest research around vitamin D

NUTRITION I-MAG GIVEAWAYS

CPD DIRECTORY Seminar, conference and webinar dates for your diary



BCNH - Academic and Clinical Excellence

- Our Level-6 Diploma in Nutritional Therapy is **NTEC accredited** and each module is **credit-rated by the University of Greenwich**
- A full year of comprehensive clinical practice we will make sure that you have the knowledge and skills required to embark on a successful career in Nutritional Therapy

Flexible Study Options

- Courses designed with flexibility in mind you can study by
 attendance or distance learning (online)
- Live-streaming and recording of all our lectures - join your class from anywhere in the world!

Our courses:

 Level 6 Diploma in Nutritional Therapy (part time, NTEC accredited)

 Online Science Foundation Course (SFC) with monthly interactive webinars and online support – enrolments throughout the year

• Short courses for the general public

Enquiries: admin@bcnh.co.uk Tel: +44 (0) 207 433 2555 Web: www.bcnh.co.uk



SUPPORTING PRACTITIONERS







Who can join? Nutritional Therapists Herbalists Acupuncturists Homeopaths Natural Chefs

www.theanp.co.uk



ESKIMO-3 BRIGHTKIDSTM JELLY SPLATS



✓ NATURALLY FLAVOURED 3 SUGAR FREE ✓ ONE SPLAT CONTAINS 250 MG OMEGA-3 DHA FOR HEALTHY BRAIN FUNCTION ✓ SUITABLE FOR AGES 3+



FIND OUT MORE ...



www.nutriadvanced.co.uk/bright-kids OR FREEPHONE: 0800 212 742

OUR CONTRIBUTORS

Each issue, *Nutrition I-Mag* enjoys contributions from many leading authorities in the nutrition world. This issue, our writers include:



Vanessa Hitch

Vanessa Hitch B. Sc.(CompMed), Adv. Dip. Nat is a Naturopath with over 20 years' experience as a clinician, speaker, educator and formulator both in Australia and New Zealand. Vanessa has a strong focus in her clinic on women's health and improving her clients' energy levels, happiness and fulfilment, so they can get the most from their lives.



Rose Holmes

Rose Holmes, Dip.ION, BSc (Hons), PGCE, mBANT, CNHC is a Registered Nutritional Therapist with a special interest in chronic illness, circadian rhythm disruption and healthy ageing. She is the Education and Training Manager at Rio Health and provides training to other practitioners and health professionals on natural therapies.



Dr Elisabeth Philipps

Dr Elisabeth Philipps DPhil BSc (Hons) BSc Nut Med FNTP is a renowned nutritional consultant and experienced speaker. She has years of clinical experience running her own private practice, alongside managing practitioner training for Nutrigold and delivering corporate client wellbeing programmes around the country. She is regularly sought after to provide expert opinion for the media, appearing on National Health Radio and in the national press.



Jenny Bodenham

Jenny Bodenham BA (Hons) DipION has been a practising Nutritional Therapist since 2005. She gained a Diploma in Nutritional Therapy at the Institute for Optimum Nutrition and has consulted privately on a wide range of health issues and worked for Higher Nature for a number of years. Jenny regularly contributes to a variety of health and nutrition publications.



Sue McGarrigle

Sue McGarrigle ND DipION CNHC mBANT NNA is a Clinical Nutritionist and Naturopath and has practiced since 2001. Sue works for Bionutri, advising and helping practitioners in their various practice matters. As a lecturer to college and university students to Masters level, Sue has trained hundreds of healthcare and medical practitioners in many aspects of nutritional therapy. She writes as a regular contributor of specialist nutrition articles for magazines and newspapers and has been a guest speaker at various national conferences.



Katherine Pardo

Katherine Pardo BSc (Hons), Dip ION is Head of Nutrition at nutritional supplement company, Nutri Advanced, one of the leading educators in the field of functional medicine. She originally trained as a Nutritional Therapist at the Institute for Optimum Nutrition in London and is committed to helping people make realistic and sustainable food and lifestyle choices for improved health and wellbeing.







Rainbow

AVAILABLE DIRECTLY FROM G&G VITAMINS OR THROUGH THE NATURAL DISPENSARY www.gandgvitamins.com • 01342 312811

G&G



News bites

A round-up of the news from the natural health industry.

Standout nominee scoops Nutrition I-Mag Student Award

he winner of the inaugural winner of the *Nutrition I-Mag* Student Award has been announced as Helen Fletcher. The award, which was sponsored by Nutri Advanced, was created to recognise students that have gone above and beyond in their studies.

After attracting an impressive number of entrants, the winner has been announced as Helen Fletcher, who was presented with her award at the recent IHCAN Conference by Nutri Advanced's Elouise Bauskis.

Our winner was nominated by Tasha D'Cruz, who explained that Helen was the student rep in their final year at college.

"She went the extra mile every time, from delivering course notes, keeping us informed on college news, acting as a go-between with college, and passing on information outside of the course. What makes her special, though, is that six months on, she's still passing on useful information on seminars and news in the industry," Tasha explained.

"She started setting up her nutrition practice at her partner's chiropractic clinic, while finishing her final portfolio and writing the last exam so that she could start taking clients as soon as she could – and she did – she was the first person in our class to do this, just six weeks after taking the final exam. In the meantime, she also applied for and was accepted onto the NCA MSc course, so while taking clients at her new clinic for the first time, she's also working towards a Masters. To top it all off, she's also arranging her wedding! So I'd say she's a pretty remarkable person, definitely worthy of being rewarded for going the extra mile for us and for herself."

Commenting on the win, Nutri Advanced's Rob Sackett said: "At Nutri Advanced, we are passionate about helping educate and develop students into successful healthcare practitioners. We know it can be a challenge to start your own practice and that's why we wanted to sponsor and support a student through the *Nutrition I-Mag* Student Awards. Our team of nutritional experts are well known for providing support to practitioners on conditions, regulations and supplements. We can provide a wealth of training materials for self-development, useful patient friendly information and work closely with industry influencers, such as Jo Gamble and Robyn Puglia.

"Congratulations to Helen Fletcher on winning the award. Helen was a standout candidate going above and beyond in her course, showcasing a passion for nutrition and a drive to get a successful clinical practice started. We look forward to working with her."



Helen (left) receiving her award from Elouise



MPs call for complementary, traditional and natural medicine to rescue NHS from financial crisis

MPs have urged the NHS to embrace complementary, traditional and natural medicine to ease the mounting burden on service provision.

A new report released by the All-Party Parliamentary Group for Integrated Healthcare (PGIH) warns that growing numbers of people suffering from long-term illnesses pose significant threats to the future sustainability of the NHS. The report also says that the costs to the health system of a number of medical conditions are increasing rapidly.

The UK-wide NHS costs attributable to obesity and being overweight are projected to reach £9.7bn by 2050, with wider costs to society estimated to reach £49.9bn per year. Furthermore, almost 3.7m people have been diagnosed with diabetes in the UK, around 20 per cent of patients will consult their GP about back pain each year and there are also around seven million people living with heart and circulatory disease in the UK.

The report highlighted that a staggering 70 per cent of total health expenditure on health and care in England is associated with treating the 30 per cent of the population with one long-term condition or more and the result of these complex health conditions is the growing problem of polypharmacy (the use of several drugs at the same time).

The PGIH report argues that Government needs to devise a strategy to fully assess the degree of drug interactions, determine the long-term health effects on patients, and arrest the trend of over medicating the population. A significant part of this strategy is to treat patients as whole persons, with individual needs, rather than with a variety of illnesses that are treated separately.

This strategy should make greater use of natural, traditional and complementary medicines, which are widely used for a variety of conditions, the report said.

David Tredinnick MP, Chair of the All-Party Parliamentary Group which produced the report, insisted that the current approach being taken by the Government is unsustainable for the long-term future of the country.

"Despite positive signs that Ministers are proving open to change, words must translate into reality. For some time, our treasured NHS has faced threats to its financial sustainability and to common trust in the system.

"Multimorbidity is more apparent now in the UK than at any time in our recent history. As a trend, it threatens to swamp a struggling NHS, but the good news is that many self-limiting conditions can be treated at home with the most minimal of expert intervention.

"Other European governments facing similar challenges have considered the benefits of exploring complementary, traditional and natural medicines. If we are to hand on our most invaluable institution to future generations, so should we."

Popular Nutritional Therapist joins forces with BioCare

BioCare has announced a new influencer partnership with Nutritional Therapist, Madeleine Shaw

The supplement brand has announced it will be working with the popular health and food blogger, who is also a yoga teacher, and says it hopes the partnership will attract a younger audience to the brand.

The partnership will initially span six months, during which time BioCare and Madeleine will work together to produce bespoke content across channels, focusing on healthy lifestyle themes, such as general health, diet, fitness and beauty. This will include a number of social posts across Madeleine's own Instagram and YouTube accounts, as well as a feature in both her own and BioCare's newsletter.

Madeleine commented: "I was really pleased when BioCare approached me as I've been a fan of their supplements for a long time. I'm excited to work with the company on a longterm basis as together we can help everyone to make simple and nutritious health decisions."

Kelly Smith, Head of Marketing at BioCare, added: "We were really drawn to Madeleine Shaw's balanced and realistic approach as a Nutritional Therapist. She has a highly engaged following and is a great fit for BioCare as we have a shared philosophy – to always search for a greater understanding of health and share this knowledge to help people stay healthy."



Bio-Kult announces educational grant

The 2018 recipient of the Bio-Kult Educational Grant has been announced.

Lesley Markey, who is currnely finishing her MSc in Nutrition Science and Practice at the Northern College of Acupuncture, has won accolade, scooping herself £1,000 to spend on her nutritional career goals. Her win also gains the college £500 to spend.

Having just completed her post graduate diploma from the college and continuing to study to achieve an MSc in Nutrition Research and Science, Lesley intends to use the grant to undergo additional training around disordered eating at The National Centre for Eating Disorders to add depth to her existing qualification and enable her to support women who have had lifelong weight struggles.

Having spent many years herself struggling with her weight, Lesley begun to get frustrated with all the information and misinformation and felt the only way forward for her was to embark on a course studying nutrition. She decided that it was important to study nutrition that was backed up by science and was evidence based. Speaking of her win, Lesley commented: "It will allow me to access training in a specialist area much quicker than I imagined possible. This will have an enormous impact not only on my own knowledge and practice but I will also be able to share this new knowledge with my clients – so we are all winners."

Hayley Milne, Brand Manager at Bio-Kult, added: "Every student is studying to make the world a healthier place and both students and practitioners are incredibly important to us. Each journey is individual but every Nutritional Therapist's goal is the same to help people lead healthier, happy lives, an important goal that Bio-Kult wants to help achieve too. Bio-Kult is thrilled to be able to give Lesley a helping start with her career and is overjoyed that the additional grant to the college will in the long term help many more students with their studies." NCA Principal, Richard Blackwell, added: "We are delighted that Lesley has won the Bio-Kult Educational Grant and are confident she will put the prize money to good use as she starts out in her nutrition career. We are also delighted to receive the secondary college prize of £500. We intend to use this money to support our research effort in the field of nutrition."





A new interactive tool to calculate dietary reference values has gone live.

The European Food Safety Authority (EFSA) has launched an interactive tool that allows nutritionists and other health professionals to make quick and easy calculations using EFSA's dietary reference values.

The DRV Finder searches by population group or nutrient, allowing users to extract and combine the precise information they need from the 32 opinions on DRVs that EFSA has published in recent years. The opinions contain DRVs for water, fats, carbohydrates and dietary fibre, protein, energy, as well as 14 vitamins and 13 minerals.

Agnès de Sesmaisons Lecarré, from EFSA's Nutrition Unit, commented: "Health professionals and authorities use DRVs to help consumers make healthy food choices. We hope they will find our DRV Finder an invaluable tool in carrying out this essential work."



Research

Nutrition I-Mag rounds up the latest research studies in the nutrition world.

Research examines potential impact mindfulness could have on weight loss

Researchers at the University of Warwick have revealed that those taking part in mindfulness courses lost more weight than others in obesity management programmes.

The study, published in the Endocrine Society's Journal of Clinical Endocrinology & Metabolism, suggested that it demonstrates that problematic eating behaviour can be improved with mindfulness application

The researchers, from the University of Warwick and the Warwickshire Institute for the Study of Diabetes Endocrinology and Metabolism at University Hospitals Coventry and Warwickshire NHS Trust, found that individuals who participated in mindfulness training as part of an intensive weight management program lost more weight in six months than other program participants who did not attend mindfulness courses.

The study examined weight loss among 53 people attending the multidisciplinary tier three weight management program at University Hospitals Coventry and Warwickshire NHS Trust. Among those recruited into the study, 33 participants completed at least three of four mindfulness sessions. The course included discussions of the difference between mindful and mindless eating, as well as an introduction to Compassionate Mind Therapy, which highlights the need to be aware of self-criticism, as well as the importance of self-confidence in achieving behaviour change.

Mindfulness course participants lost, on average, three kilograms, or about 6.6 pounds, in the six-month period following the classes. Individuals who only attended one or two of the four courses lost, on average, 0.9 kilograms, or nearly two pounds, during the same period. Those who completed the mindfulness course lost 2.85 kilograms (nearly 6.3 pounds) more, on average, than a control group of 20 individuals who did not participate in the course.

Lead author, Dr Petra Hanson, a research fellow and PhD student at the trust, commented: "This research is significant as we have shown that problematic eating behaviour can be improved with mindfulness application. We are the first centre in the United Kingdom that created a structured multidisciplinary course incorporating mindfulness and assessed its effectiveness in patients attending obesity clinics.

"Surveys of the participants indicate

mindfulness training can help this population improve their relationship with food. Individuals who completed the course said they were better able to plan meals in advance and felt more confident in self-management of weight loss moving forward. We hope this approach can be scaled up to reach a wider population."

Dr Thomas Barber, Associate Professor at the University of Warwick and Honorary Consultant Endocrinologist at University Hospitals Coventry and Warwickshire NHS Trust, added: "With the burgeoning impact of 21st century chronic disease, much of which relates to lifestyle behaviour choices, it is logical that focus should be on enabling the populace to make appropriate lifestyle decisions, and empowering subsequent salutary behaviour change.

"In the context of obesity and eatingrelated behaviours, we have demonstrated that mindfulness techniques can do just that. Adoption of mindfulness techniques is scalable to the wider population, and as such, this strategy could represent a useful expedient to facilitating healthy eating-related and potentially other lifestyle behaviours, as part of population-wide obesity prevention and management."

Funding to develop nutrition project

The University of Melbourne has received a grant to enhance nutrition in developing countries.

The university was announced as a winner of a Grand Challenges Explorations grant, an initiative funded by the Bill & Melinda Gates Foundation. Professor Muthupandian Ashokkumar, along with Dr Francesca Cavalieri and Dr Srinivas Mettu, will pursue an innovative global health and development research project, titled Edible Micro-Balloons for Nutrition Enhancement, aimed at relieving malnutrition among mothers and infants in developing countries. Grand Challenges Explorations (GCE) supports innovative thinkers worldwide to explore ideas that can break the mold in how to solve persistent global health and development challenges.

The grant will allow the team to produce edible microballoons made from protein that contain essential nutrients for adding to common foods to combat malnutrition in mothers and infants. They have developed a method that uses ultrasound waves to encapsulate oil- and water-soluble vitamins and minerals within edible shells made from a range of proteins, including milk and pea proteins. Encapsulating the nutrients, rather than adding them directly to food, helps keep them stable and promotes their absorption in the body. It can also mask unpleasant tastes, and control the timing and location of nutrient release, which can increase their performance.

Study finds synbiotic supplement favourably changes gut microbiota in the overweight

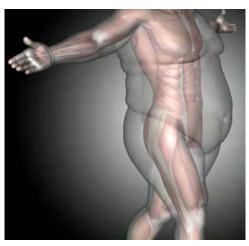
Findings from a new study have suggested that a synbiotic dietary supplement could reduce health risks in those who are overweight.

DuPont Nutrition & Health has released the results from a clinical study of a synbiotic dietary supplement, combining the benefits of a proven probiotic with a prebiotic fibre, HOWARU, which has shown the potential to improve metabolic health, while supporting weight loss.

In a previously published clinical study, a trial group that received it had 4.5 per cent less total body fat and 6.7 per cent less trunk fat than those who received a placebo supplement. The improvement in lean body mass was still evident one month after the end of the trial. Now, new findings from this study, published in Beneficial Microbes, found a beneficial impact on the gut microbiota in individuals who consumed HOWARU Shape daily over six months. Modifications to the gut microbiota that resulted from probiotic consumption included a greater abundance of the bacterial species Akkermansia muciniphila, which is associated with improved metabolic health.

The study followed 225 overweight but otherwise healthy people who consumed a powder supplement mixed into a smoothie once a day for six months. The supplement contained a placebo, the probiotic culture B420, the prebiotic fibre, Litesse Ultra, or HOWARU Shape, which is a synbiotic combination of B420 and Litesse Ultra. Regular diet and exercise habits were otherwise maintained. While consumption of B420 alone did have a positive impact on the gut microbiota, the beneficial effect was even more pronounced when B420 was combined with Litesse Ultra in HOWARU Shape.

Megan DeStefano, Global Marketing Manager at Probiotics, DuPont Nutrition & Health, welcomed the findings, commenting: "The favorable change in gut microbiota is positive for overweight individuals struggling with metabolic disorders, such as leaky gut and type 2 diabetes. In particular, *Akkermansia* is associated with improved gut barrier function and glucose tolerance. We also have observed a reduction in circulating inflammatory markers which supports heart, kidney and respiratory health."



Importance of omega 3 studied in brain health

A new study has revealed that long-chain omega-3 polyunsaturated fatty acids (LCn-3PUFA) has the potential to enhance blood flow in the brain.

In light of the results, researchers have called for further studies to examine the potential in greater detail.

The pilot randomised controlled trial was undertaken to investigate the effects of taking a DHA-rich fish oil supplement for 20 weeks on cerebrovascular function, mood and cognitive performance.

Borderline hypertensives, aged between 40-85, with low habitual LCn-3PUFA intake, took four capsules/day of EPAX (1600mg DHA, plus 400mg EPA) or placebo (corn oil). Cerebrovascular function was then assessed at baseline and after 20 weeks in 38 completers (19 on each supplement) using transcranial Doppler ultrasound of blood flow in the middle cerebral artery at rest and whilst performing a battery of cognitive tasks (neurovascular coupling).

It was found that the primary outcome, cerebrovascular responsiveness (CVR) to hypercapnia, increased 26 per cent in women, with no change in men. In contrast, neurovascular coupling increased significantly in men only.

The study also noted that there was no associated improvement of mood or cognition in either men or women. The researchers noted that "the lack of change in mood or cognition could have been due to inadequate intakes of either EPA or DHA, too brief a period of supplementation or an inappropriate choice of participants for our study".

"These preliminary observations indicate that LCn-3PUFA supplementation has the potential to enhance blood flow in the brain in response to both hypercapnic and cognitive stimuli. Future studies should examine differential effects of EPA and DHA and take account of the gender differences in responsiveness to supplementation," the researchers concluded.

"Such factors, together with considerations of type, dose and duration of supplement and potential gender differences in responsiveness, should be addressed in the design of future adequately powered intervention trials to fully evaluate the potential for EPA- and DHA-rich oils to counteract microvascular disease in our high-risk aging population and thereby help to prevent premature cognitive decline and dementia."



New to market

Nutrition I-Mag brings you the latest product developments in the nutrition world.

SUPER TEAS CREATED BY ADUNA

Baobab is among the key ingredients in a new range of 'super teas' launched by Aduna.

The organic infusions are powered by nutrientrich African superfoods, tapping into four key trends of superfoods, ethical consumerism, Africa and premiumisation.

Made with whole pieces of fruit, herbs, leaves, flowers and spices, Aduna Super-Teas are available in five flavours, including Vitality, featuring lemon, ginger and baobab, Relax, made with cinnamon spiced cacao, and Radiance, a blend of rosehip, aloe vera and hibiscus.

Aduna's speciality organic blends are served in tea pyramids, enabling superior brewing power and flavour. The blends are visible through a window, allowing consumers to see the quality, texture and colour of the ingredients. The infusions have been created to be equally as delicious served hot or iced, making them ideal all year round.



G&G FURTHER DEVELOPS PORTFOLIO

The latest addition to the growing range at G&G Vitamins is 5HTP.

Containing high quality 5HTP from griffonia seed, it is blended with magnesium taurate and is considered a more efficient metabolite of L-tryptophan and precursor to serotonin, which is used to create melatonin and initiate a sleep cycle.

FEEL GOOD FROM PUKKA

Feel New Tea is the latest addition to the Pukka range, designed to nourish and support the liver and digestion.

The organic wellbeing company has created the new tea, blended by Master Herbsmith and practicing herbalist, Sebastian Pole, made with the finest medicinal-grade organic herbs and spices, including aniseed,

fennel, cardamom, and turmeric. These superspices are used to stimulate and support the processes within the liver and digestive system. Research undertaken by Pukka's in-house herbal research and education team has shown that this blend has significant impact on enzymes found in the liver. The results showed elimination of toxins in the gut by improving both the liver and gut function.

Naturally caffeine-free and ethically sourced, it contains 100 per cent organically grown ingredients.



feel new

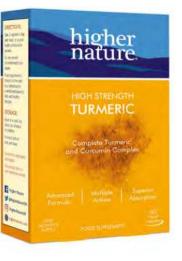
TIME FOR TURMERIC

Higher Nature has developed a new high strength turmeric supplement.

The complete turmeric and curcumin complex is a whole spectrum formulation, which is more beneficial than curcumin extract, and combines the benefits of traditional use with scientifically proven extracts. With Cavacurmin and Turmacin (both backed by clinical studies) guaranteed strength and purity, underpinned with whole turmeric root powder, this supplement provides the complete range of actives as found in nature, and is 100 per cent vegan.

Cavacurmin is a highly absorbable curcumin extract, containing a range of curcuminoids, which are the lipohilic actives from turmeric. The curcumin has been combined with cyclodextrin to make it water soluble and bioavailable. Compared to standard curcumin extract, Cavacurmin is

40 times more absorbable as measured by total curcuminoid levels in the blood. Turmacin contains the water soluble components of turmeric, which have a long history of use in Ayurvedic medicine. It is particularly rich in turmerosaccharides but also includes turmerones and terpenoids. Research has shown Turmacin to help alleviate joint pain and to reduce inflammation.





Have you seen the products in our Cleanse & Detox range?

Products that support the body's natural eliminative processes and contribute to protection of cells from oxidative stress and normal function of the immune system.







The brand you can talk to:

We have a team of Clinical Nutritionists at the end of our advice line, open to you, for product support and advice (5 days a week). 0121 433 8702 or clinical nutrition@biocare.co.uk

THE QUEER'S AMARDS DO ENTERMARDS INTERMEDIAL TRADE

www.biocare.co.uk

BANT NEWS The latest developments from the leading professional body for Registered Nutritional Therapists, BANT



BANT'S COMMENTS REGARDING TYPE 2 DIABETES: NHS TO OFFER 800-CALORIE DIET TREATMENT

llowing press reports of NHS England offering diabetic patients an 800-calorie diet to reverse Type 2 Diabetes, BANT (British Association for Nutrition and Lifestyle Medicine) would like to comment.

Following a trial last year, which helped half of participants living with Type 2 Diabetes, the NHS is now rolling out the low-calorie programme. The treatment consists of 800-calories per day using liquid meals and shakes for three months.

BANT would like to express concern around the lack of education given to the patients around diet and lifestyle factors that mediate Type 2 Diabetes. There is also reliance on shakes and meal replacements, which takes the patient away from a whole-food approach. Often shakes are filled with sweeteners and synthetic vitamins and minerals and therefore not a credible match for quality nutritious food. Finally, there is no mention of calorie quality and it's well-regarded that not all calories are equal and in fact consuming 800 calories of sugary foods may do little

with reversing Type 2 Diabetes. The programme may, therefore, only be a quick fix and creates a high risk of relapse without educating the client on the right foods for prevention of the disease.

BANT Registered Nutrition Practitioners consider individuality that enables personalisation of dietary advice based on the most up-to-date research available. They do not suggest 'one-size-fits-all' advice following the health trend of the moment. BANT Nutrition Practitioners will provide the advice that best suits the client in front of them and educate their clients on diet and lifestyle factors for prevention and supporting health concerns.



BANT MEMBERSHIP - NEW AND RENEWAL OPENS JANUARY 1

With 2018 fast coming to an end, the BANT membership period is drawing to a close and the new BANT year will be beginning.

The number of activities that BANT undertakes on its members' behalf is growing year on year, both due to the rapidly changing climate the profession is experiencing but also because the organisation wants to help its members practice professionally within a well-regarded profession. BANT's volunteer directors, part-time managers and dedicated member volunteers are continuously thinking up ways and projects to help support members in day to day practice and are increasing engagement with professional and regulatory forums. Some examples of these are: **Regulatory issues** – working to ensure BANT is engaged fully with regulatory, professional bodies and stakeholders and is at the heart of

nutrition debate going forward pre and post-Brexit. ■ Communications – promoting

the profession and our members so that there is increased awareness via traditional and social media. Internal communication to members via Facebook Members, LinkedIn and the BANT eNews keeping members' abreast of the work BANT does on their behalf

■ Free database access for both the Natural Medicine's Database (value \$299) and the Nutrition Evidence Database, created and managed by BANT to support evidence-based recommendations. Professional supervision –

aligning the profession to other NHS linked healthcare professions.

Free access CPD – monthly webinars, toolkits, training modules via the Learning Zone and CPD listings for external events/webinars. Local networks and Regional **Events** and the BANT Annual AGM and Conference.

■ Free professional practice support and guidance through any query or complaint, thanks to the volunteer PPC (Professional Practice Committee).

■ Member benefits – discounts and opportunities from a wide range of organisations, tests, supplements and lifestyle organisations, amongst

others.

■ GP Engagement Project –

tools launched and available for members' use.

Volunteer support – without our volunteers, BANT is unable to operate and we thank them gratefully with improved role support and an annual Volunteers of the Year Ceremony.

Looking forward to 2019, it is going to be a very exciting and busy time for BANT, the profession and the UK in general. The organisation will be announcing its objectives, goals and specific strategy at its AGM and Conference, which is taking place at Mary Ward House, London, on Saturday, March 23, 2019.

The AGM is open to members only but the BANT Conference that follows, and is entitled 'Kindergarten to Healthy Adulthood. Nutrition and Lifestyle Medicine Across Lifespan', is open to all healthcare professionals. To come and listen to speakers Dr Deanna Minich and Dr Kate Lawrence and to gain valuable CPD whatever your healthcare profession. Book at https://tinyurl. com/ycax4dqq

GENE LIVING

in January

GENE LIVING & SWAMI IT'S TIME TO GET PERSONAL WITH YOUR CLIENTS!

What is personalised nutrition and why does it matter?

On the one hand, the nutrients we consume can affect the way our genes are expressed; on the other, our genes and blood type are able to influence how our bodies respond to these nutrients.

Not only will personalised nutrition optimise the health of the individual, but it may also work on a larger scale to help prevent society-wide diseases such as obesity, Type 2 Diabetes, cardiovascular disease, cancer and malnutrition.

Incorporate personalised nutrition into your practice with our guidance:

We require extraordinary people for an extraordinary job - running your own individualized wellness groups for Gene Living or SWAMI. SWAMI is a personal approach to fitness and weight loss that will help you identify the most effective nutrition method for your clients using their unique genetic makeup. Gene Living, on the other hand, explores how blood types influence what foods have adverse effects on an individual's health, which provides an accurate personalised diet plan.

For further information:

Visit: www.geneliving.eu & www.sowhatami.co.uk Phone: 01778 428676 Email: info@geneliving.eu

IHCAN Conference 2019 series – speakers confirmed

We are delighted to reveal the first set of speakers confirmed for the 2019 IHCAN Conference events.



ur 2019 series is looking to be the best yet as we welcome back some of our most popular speakers, as well as confirming a number of new experts who will take to the IHCAN Conference stage for the first time.

The IHCAN Conference series kicks off on February 16 with Dr Nigel Plummer, who is returning after receiving excellent feedback from his presentation last year.

On March 9, we will be welcoming back Tom O'Bryan to talk on the topic of 'Leaky Brain'. One of our most popular speakers, feedback from Tom's talk last year was great, with one delegate commenting: "Tom O'Bryan is a fantastic speaker, he is easy to listen to, knows his subject inside out and delivers it well."

On March 30, we are deighted to confirm two new speakers to speak on the topic of 'Hidden mineral imbalances – their role in metabolic syndrome, stress and accelerated aging'. During this event, delegates will learn from Dr Tanja Werner. Dr. rer. nat (Doctor of Natural Sciences), and Proff Vormann, Dr Werner is a published author and co-author in numerous scientific publications, including in the areas of nutrition, magnesium supplementation and acid-base balance. Her expertise focuses on nutritional biochemistry and pathophysiology, and the importance of acid-base homeostasis. She recently co-organised the 2018 3rd International Acid-Base Symposium in the Slovak Republic and often presents as a keynote speaker at international conferences to educate healthcare practitioners and pharmacists around the world.

Following on from this will be our conference on May 11 on the theme of gut health, where we will be joined by Ben Brown and Allison Siebecker. We welcome back Ben as one of our most popular speakers, with delegates from his talk last year giving fantastic feedback and commenting: "Ben Brown was excellent, great application for clinical practice."

Ben is a science writer and speaker specialising in nutrition and functional medicine. He is author of *The Digestive Health Solution* and contributes regularly to industry magazines and scientific journals.

On September 14, we will be joined again by Dale Bredesen following his excellent presentation at last May's conference; 100 per cent of delegates found his talk excellent or good, commenting: "Dale is a fantastic speaker, delivering complex information succinctly and clearly."

BOOK NOW

Early-bird booking opens soon, look out for further announcements on www.ihcanconferences.co.uk or follow us on Twitter for updates **@IHCANconference**

Don't delay in booking your place as the success of opening the conference booking line has resulted in 400 bookings for the series being made in the last week alone.

PURCHASE DOWNLOADS

The final sold out conference of 2018 took place on Saturday, November 17, focusing on the immune system. We were joined by three expert speakers; Robyn Puglia, Catalina Fernández Ana de Portela and Dr Malcolm Kendrick, who all delivered fantastic talks on the subject.

If you missed the event, or any others throughout the year, you can purchase the downloads of the presentations at www.ihcanconferences.co.uk/2018-downloads.

SAVE THE DATES

Save the 2019 IHCAN Conference series dates, and make sure you don't miss out now that the bookings line is open. THE 2019 SERIES WILL BE:

- February 16.
- March 9.
- March 30.
- May 11.
- June 29.
- September 14.
- November 23.



Booking now open

Save **£££** with our early-bird rates until 1 February 2019, with additional discounts available for previous attendees, members of associations and students.

16 February:	The Microbiome, the Immune System and early life- three major drivers of health and disease - Nigel Plummer
9 March:	Closing the gates to brain deterioration: how to help your 'tired all the time', brain fogged clients - Tom O'Bryan
30 March:	Hidden mineral imbalances – their role in metabolic syndrome, stress and accelerated ageing - Proff Vormann and Tanja Werner
11 May:	SIBO, IBS and beyond: getting the gut better with first- and second-line therapies - Ben Brown and Allison Siebecker
29 June:	IHCAN Summit - speakers to be confirmed shortly
14 September:	How to prevent and reverse cognitive decline: using personalised medicine to make Alzheimer's a rare disease - Dale Bredesen
23 November:	Hormones, gut brain & immunity: the care and feeding of the endocannabinoid system - speakers to be confirmed shortly

To secure your place, go to **www.ihcanconferences.co.uk** or call the team on **01279 810080**

@IHCANconference



A PRACTITIONER GUIDE TO CLEANSING

Nutrition I-Mag brings you expert advice on educating your clients on the right approach to fad free, long-term detoxification.

t is a certainty that no sooner is the festive period out the way that talk of detoxing and dieting comes to the fore. These days, more than ever, with the focus on social media, there appears to be huge pressure on people to take part in some kind of wonder detox that is supposed to leave them looking and feeling great.

But as Nutritional Therapists, you will know that there is no quick fix, and that a faddy approach to restrictive diets is simply not going to achieve balanced health. Of course, many people will want to use the start of a new year as a time to make some healthy eating habits, and this should be encouraged, but it's important to educate your clients on the healthiest way to do this, to ensure long-term gain.

6

"Detoxification isn't something that we do once or twice a year, after Christmas or after a holiday. There is actually so much more to detoxification and the functioning of our liver and it's a process that occurs biologically every day," explained Beth Morris, Clinical Nutritionist at BioCare.

"Detox' programmes are heavily endorsed and publicised on social media, in magazines and on television, especially in January. Although it is great to see people trying to reduce their exposure to toxins and eating fresh and organic fruit and vegetables, such practices can sometimes create more damage than good if not done properly. Especially when embarking on heavy metal chelation, people should be supported by an experienced practitioner who can assist them with the right supplements and nutritional protocol."

Dr Elisabeth Philipps PhD BSc Hons BSc Nutr Med, Nutritional Therapist at Nutrigold, continued: "A detoxification programme should be recommended by NTs on a case-by-case basis. For many people, a detoxification programme is a powerful way to support health. This is why it is often recommended at the start or early stages of a NT programme, whatever the time of year.

"January is not always the best time of year to do a full detox as the body is in winter hibernation mode and may be exhausted from the Christmas season. Best times for the body to fully detox are at the spring and autumn equinox, when energy is at its highest. Avoid an immediate start to a detox, i.e. take a few days to gradually remove foods and drinks so that body has time to adapt to no caffeine etc."

Vanessa Hitch, Naturopath, Clinical nutrition BHSc (Comp Med)., Adv. Dip.Nat., Dip. BotMed., Dip. Nut., Dip. Hom, who advises for Bio-Practica and its Basica Active product, agreed, adding: "I believe detoxification needs to be an ongoing consideration for everyone. Each person is different in terms of their exposure to toxins from the environment, how much they've been exposed, and for how long. The next consideration is their ability to process these toxins and how that needs to be supported. Based on the level of toxicity seen in the general population, detoxification support is advisable at least seasonally (every three months). However, rather than a single ramp up in detoxification, many people require ongoing yearround support and protection for their detoxification organs."

Nutritional Therapist, Hannah Braye, Technical Advisor at ADM Protexin, which manufactures the Bio-Kult and Lepicol brands, explained: "The concept of detoxing can be contentious. Many medical and nutrition professions take issue with the faddy nature of short-term detoxes and cleanses in part because they misleadingly imply that detoxing is a short-term, occasional process you have to actively initiate. In fact, detoxification is a naturally occurring process taking place in the body 24 hours a day, seven days a week, 365 days a year.

"The main detoxification organs are the liver, kidneys, lungs, skin, lymph and bowels. If our bodies weren't continuously detoxifying each time we go to the toilet, with every pint of blood that passes through the liver, and with each breath, we would soon be in serious trouble. As a Nutritional Therapist, I, therefore, believe it is important to stress to clients that detoxification is not a quick fix, but something which they need to work to support through diet and lifestyle on a continuous basis, all year round.

"However, undoubtedly, you will come across clients in your practice displaying signs and symptoms which indicate that their detoxification systems may have become overburdened (due to excessive exposure to alcohol, smoking, prescription medications, recreational drugs, chemicals, environmental pollutants, stress hormones or genetic variations compromising their detoxification potential). These clients may, therefore, find it useful to follow a protocol specifically aimed at supporting the body's detoxification systems. Others find detox protocols a useful way to help motivate them to make diet and lifestyle changes."

THE NEED TO DETOX

One of the first questions to ask is do we actually need to detox? In today's modern world, the answer is often yes. "Since the industrial revolution, our bodies have been



heavily exposed to thousands of manmade chemicals and the liver can become overwhelmed by the sheer quantity of toxins which it has to process on a daily basis from both our internal (for example, hormones) and external (for example, pesticides) environment," Morris explained.

"The types of toxins vary from the by-products of manufacturing, such as dioxins and PCBs to heavy metals like mercury and aluminium. Your body's solution to pollution is dilution, so any un-metabolised toxins can be stored in our tissue to take them out of harms way. Dietary factors can have a profound impact, such as intake of high sugar, inorganic, processed foods, putting more stress on the liver, eventually leading to liver dysfunction and pathology. Even stress itself, which is all so common in today's society, can have a profound effect on the liver."

Hitch added: "If we look at toxicity from an evolutionary perspective, we have evolved over hundreds of thousands of generations to deal with a certain level of toxicity, and yet in the last few generations, there are unprecedented levels of man-made and industrial chemicals in our environment. To give an example, over 200 toxic chemicals and heavy metals have been identified in newborn baby cord blood, many in higher levels than what government regulations deem as safe. If the level of toxicity overwhelms our capacity to detoxify, the increasing toxin burden will cause physiological dysfunction, and ultimately contribute to serious health conditions.

"Human history has never seen such high levels of environmental toxicity. Therefore, it is critical for the body's detoxification processes to be working at optimal capacity to deal with this modern-world burden."

And Dr Philipps continued: "The age of chronic inflammatory, degenerative and man-made diseases is here! There's no denying that in the last century, there has been a shift from infection, trauma and undernutrition as the primary cause of disease and death to the overwhelming rise of non-communicable diseases (NCDs). These NCDs include heart disease, lung and liver disease and cancer, caused by multiple, complex intersecting influences and are fast becoming the primary causes of mortality in the western and developing world.¹ In fact, it is estimated that the four major NCDs will be responsible for 75 per cent of worldwide deaths by 2030.²

"However, despite the fact that we are now living longer (albeit both the USA and the UK are now showing signs of stasis or reversal in some populations of expected life span), we are often doing so with chronic diseases. The incidence of cancers, diabetes, asthma and heart disease – and the conditions that precede and underpin them – has grown, rather than diminished. The factors involved are many and often complex and this chronic disease epidemic calls for a change in thinking and approach to current approach to health.³"

Rose Holmes, Nutritionist, BSc, Dip.ION, PGCE, MBANT, Education and Training Manager at Rio Health, pointed towards the simple signs that someone needs to detox.

"Common signs that detox is needed might include fatigue, muscle aches, unexplained headaches, sinus congestion, brain fog, insomnia, sleep disturbances, memory loss, poor concentration, moodiness and sometimes skin rashes, acne, bad breath, body odour and cravings. This isn't to say that everyone who is fatigued needs 'a detox'," she explained.

"However, I also would add that everyone does need to detox. Daily. This is because we are daily encountering toxins with which our body must remove. A gentle, but potent detox drink like barley grass juice extract can help in this respect as it provides nutrients whilst also detoxing and alkalising the body."

Let's focus more on toxins, what they are and the effect they have on our system.

"A toxin is any substance which can disrupt homeostasis and become harmful to the body if left to accumulate in the body tissues over time and eventual ill health. Therefore, the elimination process or detoxification of these toxins is an important system to support in nutritional therapy," Morris explained.

"Detoxification underpins the physiology of every body system and our ability to adapt to and thrive in our environment. It regulates the level of xenobiotics (external toxins such as pollution chemicals or pesticides), which may otherwise dysregulate system function. For example, fluoride can go on to impair the thyroid.¹ It is equally important for regulating those substances produced by the body's own systems, which also possess the capacity to promote disease, such as homocysteine and cardiovascular disease (CVD).ⁱⁱ Endobiotics refers to substances that are found within the body naturally that become unregulated, such as hormones or neurotransmitters. An example is dysregulation of oestrogens, which is associated with fibroidsⁱⁱⁱ and endometriosis.^{iv}

"In turn, the process of detoxification itself is innately dependent on each body system functioning well and in synergy with each other. Therefore, supporting our detoxification capacity can be a powerful way to protect our long-term health."

Dr Philipps went on: "Exposure to environmental (exogenous) and internal (endogenous) toxins is widespread, increasing and lifelong⁴; the biological effects of many toxicants are non-linear – that is very low doses can have profound physiological effects. Of notable interest are the obesogenic toxins such as Bisphenol A (BPA), a plasticiser used in cling film, plastic bottles and plastic wrap foods and organochlorines like pesticides, PCBs and dioxins that find their way into the food chain.⁵ Indeed, marine plastic pollution has become a big issue in the last few years, with evidence mounting towards consumption of plastic debris by marine organisms, translating into toxic exposure and increasing toxic load.

"Back in 2002, a small study of nine healthy people who did not have occupational chemical exposure discovered that each person carried an average of 91 chemicals, pollutants, and pesticides.⁶ In all, 167 chemicals were found in the participants. Most of these toxins did not exist 90 years ago.⁷ This incredible change in the environment is no doubt a key player in altering human health.

"Western science and medicine tend to view illness and disease as a 'cause-and-effect' phenomenon, often caused by external factors. Infection through the myriad microbes, such as bacteria and viruses, are commonly cited. Less commonly considered are the many thousands of environmental chemical compounds we are exposed to on a daily basis and the effect that these have on our health. Current recognition of the effect of small particulate matter on human health is slowly becoming recognised as a major factor in health management, but other compounds are also problematic and cumulative⁸."

A 'TYPICAL' DETOX

The general public can often be quite confused when it comes to what should and shouldn't be included in a detox, how long it should last and even if they need to do one.

Morris pointed out that there is not a one size fits all approach.

"As Nutritional Therapists, we treat each client as an individual, there is no 'one size fits all' approach, especially when it comes to detoxification. While going through intake forms and talking to our clients, we can look out for symptoms, such as frequent headaches and migraines, unexplained rashes and allergies, sluggish bowel, skin complaints, such as acne, small fat deposits under the skin



or dark circles under the eyes," she explained.

"Some clients may have a higher exposure to toxins than others, such as a lack of fresh and organic fruit and vegetables in the diet, smoking, increased alcohol intake, use of inorganic cleaning/cosmetic products, environmental toxins, such as pollution, polypharmacy, the list goes on. Commonly, individuals want to 'detox' after the festive period due to excess weight gain. In a way, detoxification is a good focal point in weight loss as well, as it's important to eliminate toxins mobilised from fat stores."

Hitch continued: "The most common mistake I see in practice is people who go on a strict detox program, only to swing completely in the other direction immediately afterwards, by drinking increased amounts of alcohol and coffee, and eating large amounts of unhealthy foods. I call this the 'detox-retox' problem and it can be even more damaging than not doing a detox at all. A moderate, ongoing maintenance strategy is very important, reducing incoming toxins from the environment, and supporting our elimination pathways and pH balance in the body."

Braye continued: "A number of common mistakes are often seen in detox protocols conducted without professional nutritional advice. For example, people often embark on very restrictive water or juice fasts, or raw food diets in the New Year after the indulgences of Christmas. However, sticking to such low calorie, cold diets at the frostiest and darkest time of the year is usually unrealistic and sets clients up to fail, leaving them feeling unmotivated.

"At this time, a two-prong approach centered around one, the removal or reduction of toxic substances in one's environment and two, a dietary pattern favouring whole, unprocessed, plant-based foods in order to provide the nutrients required to help detoxification organs function optimally, would seem to have the best overarching scientific underpinning¹.

"For clients you suspect of carrying a high toxic load, going in all guns blazing with very restrictive or intense detoxes may also be detrimental. Adipose tissue is a storage compartment for lipophilic persistent organic pollutants (POPs).² By sequestering POPs, adipose tissue can protect other organs and tissues from POPs overload. However, the accumulation of lipophilic POPs will increase total body burden. These accumulated POPs are slowly released into the bloodstream, and at increased levels during weight loss.² Therefore, extreme protocols resulting in rapid weight loss in individuals with a high toxic load may result in increased exposure of the body's detoxification systems to toxins, which, if not working optimally or being supported with the nutrients required to safely detoxify such substances, could potentially do more harm than good."

When looking at the basics, there are some simple steps that can be recommended when putting together a programme. It involves both the foods to remove and then the beneficial foods to add back in.

"Diet high in a variety of plant matter, low or no dairy and meat intake (only chicken, turkey or fish if eating meat), fresh vegetable juices, especially green juices boosted with supergreens powders like spirulina, avoid alcohol, sugar, processed foods, caffeine, 2-2.5L filtered water intake," Dr Philipps suggested.

Hitch added: "Good detoxification starts with a diet high in unprocessed foods, lots of organic vegetables and moderate fruit, some nuts and seeds and a variety of good quality organic protein. Plenty of purified water for good hydration is also important. Limit unhealthy choices such as fried, fatty or high sugar 'junk' foods, coffee and alcohol. This will give the body a rest from its regular incoming burden, boosting the body's detoxification resources.

"Choose organic wherever possible. Foods containing

chemical residues from pesticides and other sources may add to the toxic burden of the body and should be avoided. Local produce is recommended. Canned foods usually contain a plastic inner lining that contains chemicals, which may add to the toxic burden of the body. Avoid eating overnight from 7pm to 7am (provided there are no blood sugar issues). This will allow the digestive tract and body vital rest and detoxifying time overnight."

Morris added: "As a broad approach, it's important to regain the balance on Phase I and Phase II pathways and this can be done through reducing toxicity through diet as well. Think about significantly reducing fried and chargrilled food, processed foods with artificial sweeteners (for example, aspartame), flavourings and colourings, as well as histamine-rich or releasing foods, such as red wine, chocolate, mould, heavy metals, and paracetamol."

Holmes added: "Detoxing is about what might be added in; chlorophyll-rich barley grass juice extract, for example, and sufficient water, as well as exercise and dry skin brushing. Detoxing is also about what should be taken out; sugar, alcohol, non-organic foods, processed foods, and household and skincare products with 'nasties'."

Braye continued: "Some programmes go further and also advocate abstinence from gluten containing grains, dairy and other animal products. In one study assessing the effects of a three week 'toxin elimination diet' that involved the removal of refined grains, red meats and eggs, processed foods, foods with artificial flavour enhancer, alcohol and instant foods, such intervention was found to result in a significant reduction of serum γ -glutamyltransferase (an enzyme that plays a key role in the gamma-glutamyl cycle, a pathway for the synthesis and degradation of glutathione and drug and xenobiotic detoxification).⁴ Reductions in body weight, body fat percentage, body fat mass, waist circumference, LDL- cholesterol, HDL-cholesterol, triglyceride, total cholesterol, systolic blood pressure, and diastolic blood pressure were also observed.

"Studies demonstrate that numerous nutrients from food can modulate processes of conversion and excretion of toxins from the body.⁵ Many foods serve as bifunctional modulators, possessing the ability to either induce or inhibit detoxification enzyme activity based on the dose. Therefore, following a mixed, varied diet, full of different plant-based, whole foods is recommended, as smaller amounts of a variety of compounds might be more therapeutic and supportive for biochemical pathways than high concentrations of nutrients through high-dose supplementation or the repeat, daily ingestion of large quantities of the same food¹."

Morris recommended an environmental cleanse, commenting: "Firstly, the key place to start with any plan is to reduce toxin exposure as much as possible. Think about the basics, such as the air we breathe, the water we drink and what we put on our skin, as well as what we put in our mouths. Dietary and lifestyle products are the two factors that you can look at first so choosing organic foods and natural beauty products is an essential starting point. Drinking unfiltered water, microwave usage and over-use of plastic are common risk factors for poor detoxification. Other culprits include car exhaust fumes, cigarette smoke, mycotoxins, caffeine, pesticides, alcohol, and the use of multiple medications."

Dr Philipps added: "Naturopathic techniques where indicated, dry skin body brushing to stimulate the lymphatic system, Epsom salt baths, water or coffee enemas (or colonics) and castor oil packing may all be implicated in a detox programme. Gentle exercise (for example, yoga) and especially walking in the fresh air and synergistic therapies including acupuncture, massage, colonic therapy etc.

"Lifestyle (including sleep and exercise), as well as diet and specific nutrients can enhance and optimise detoxification pathways by ensuring optimal enzyme function and thus prevent disease and restore health.⁹ For these reasons, we believe that supporting biotransformation through functional nutrition is a cornerstone of health!"

The extreme approach should also be advised against.

"Detoxification needn't be a strong/extreme approach – build up with detox support gradually, being sure to optimise gut health, reduce exposure to key environmental factors and gradually increase dietary intake of liver supportive foods," Morris continued.

ADDITIONAL SUPPORT

Any protocol to cleanse can benefit from adding in certain nutritional supplements.

The gut is imperative so a big part of the focus should be placed on this area.

"One of the largest detoxification components of the

FOCUS ON THE LIVER

If a cleanse programme is to work effectively, attention must be paid to ensuring the liver is functioning correctly.

Morris explained: "Our liver is responsible for the production of enzymes, bile, cholesterol and hormones, transformation and storage of nutrients and removing pathogens from the bloodstream. So, at some level, Nutritional Therapists will need to support the liver to some degree in every protocol.

"Test results from a GP investigation, such as a liver function test or private functional tests, which can indicate a client's environmental toxic exposure, hormone levels and genetic polymorphisms, providing body is the trillions of bacteria found in the digestive tract. Therefore, supporting a healthy microbial balance through the use of fermented foods and probiotic supplements is vitally important (I would recommend working on gut healing for a period of time beforehand to prepare for any detox protocol)," Braye explained.

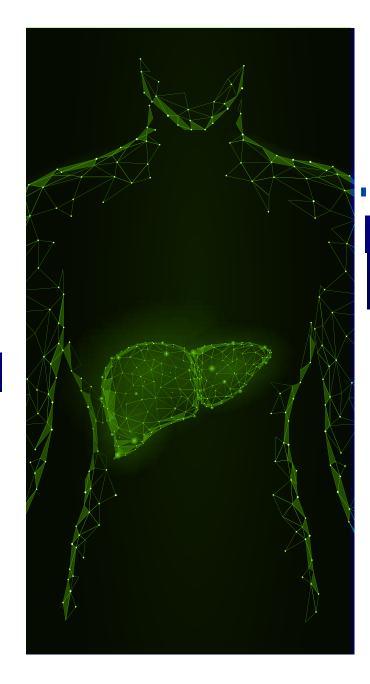
"Many waste products are removed from the body in our stools. Maintaining regular healthy bowel movements is, therefore, essential for detoxification. Having a balanced gut flora is important to ensure healthy regular bowel movements, as well as improve overall digestion. Certain strains of gut bacteria are also able to bind to toxins from food and water.⁶ For example, probiotic bacteria have been found to bind heavy metals such as cadmium and lead at the levels commonly found in foods^{6,7} They also play a role in helping to support intestinal barrier function,⁸ and the gut-liver axis⁹ by reducing levels of circulating lipopolysaccharides.

"Those who don't consume enough fibre in their diet or who are undertaking a fast may also find it beneficial to take psyllium husk, a gentle water retentive fibre, which helps to

us with more tools in our toolbox to personalise a client's plan for detoxification."

But that's not the only body organ that needs to be considered.

"When we think about detoxification, we forget that our bowel and kidney health are important foundations to support this process. So irregular bowel movements or gut permeability, for example, can otherwise lead to greater circulation of toxins that cannot be swiftly eliminated. They are therefore re-circulated, which increases the chance of detox symptoms (such as skin breakouts and headaches) and potentially further ill health," Morris explained.



bulk and soften the stool, assisting gut transit."

Morris added: "The detoxification process relies on elimination through the gut, as well as the kidneys and the skin. Therefore, addressing gut dysbiosis or permeability with live bacteria and L-glutamine, for example, can be really useful. In fact, our microbiome may even upregulate our own detox enzymes and directly metabolise environmental toxins themselves. Bile synthesis and bile flow is also worth focussing on in terms of fat and cholesterol elimination."

Dr Philipps added: "Plant-based digestive enzymes and rcumin to support digestion of food and gallbladder/ le function. Digestive enzyme formula should have ecialist enzymes, such as alpha-galactosidase to pport digestion of plant sugars (raffinose) that may rease bloating, phytase to break down the antitrient phytic acid in plant matter. This is important if you are increasing plant intake in your diet."

Supplements to support Phase II pathways are to be recommended.

Morris suggested:

Acetylation: Mostly involved in dealing with the toxic by-products of car exhausts, cigarette smoke, medication, fluoride and histamine. Key nutrients include vitamins C, B2, B5 and B6, as well as N-acetyl-cysteine.

■ Glucuronidation: Heavily involved in the detoxification of prescription medications, tobacco chemicals, and bisphenol-A (BPA). Key nutrients include vitamin B3, B6, iron, broccoli extracts and curcumin.

■ Sulphation: This pathway is also involved in the detoxification of medications, as well as regulation of cholesterol, thyroid, sex hormones, such as oestrogen and bile acids. Key nutrients include vitamin B6, molybdenum, NAC and methyl-sulphonyl-methane (MSM).

Methylation: Involved in the detoxification of neurotransmitters, homocysteine, histamine and

heavy metals. Consider methylfolate (or 5 MTHF) and methylcobalamin (B12), B6, B2, magnesium and zinc. **■ Glutathione conjugation:** Essential pathway for heavy metals, pesticides, mycotoxins and heavy metals. Key nutrients include zinc, alpha lipoic acid, vitamin B2 and B3, as well as reduced glutathione."

Dr Philipps added: "Specific detox support formula containing bioactive nutrients such as B vitamins (P5P, reduced folate, methkycobalamin), zinc citrate and amino acids to support Phase 1 and 2 liver detox pathways – forms of nutrients in this type of supplement should be bioactive to ensure they are effectively absorbed and are bioavailable. This is important because the efficiency with which your system absorbs key nutrients affects both the speed and level of positive health effects, as well as impacting on the cost of your supplement programme."

And Hitch recommended: "Additional support and protection for the liver is sometimes needed by using herbs such as milk thistle and globe artichoke."

Holmes highlighted chlorophyll-rich spray-dried juice extract of barley grass as it is a nutrient-dense, chlorophyll-rich, alkalising and deodorising means of detoxing which can be used daily to gently but potently aid optimal and healthy detoxification.

"Recent research highlights the contribution chlorophyll-rich and nutrient-dense ingredients like barley grass might have for prevention of chronic disease and promotion of healthy ageing. A 2018 study in *Oxidative Medicine* and *Cellular Longevity* found preventive and therapeutic roles of barley grass for chronic diseases, calling it 'one of the best functional foods for preventive chronic diseases and the best raw material of (the) modern diet'^v. This study confirms benefit of flavonoids, SOD, chlorophyll and many other beneficial constituents of green barley grass, and their inclusion especially for healthy ageing."

Nutritiôn Product Showcases

Freedom, Cleanse, Restore – Pathogen Cleanse

FREEDOM CLEANSE RESTORE is an exceptional broad spectrum botanical remedy created by Dr Amin (PHD parasitologist) that restores optimal digestive health. It is an effective and trusted practitioner product.

It treats intestinal and tissue invading protozoans and helminth parasites as well as pathogenic bacteria, fungi, and yeast. The ingredients are synergistically combined with compatible energies so there are few herxiemer reactions. Acts by

CLEANSE

Killing parasites and pathogens 2. Cleaning organ systems
 Restoring damaged tissues to a healthy state.
 Simple to use: Take away from food.
 Take 2 Freedom capsules in the morning
 Take 2 Restore capsules in the afternoon
 Take 2 Cleanse capsules at bedtime
 For more information visit www.parasitetesting.co.uk

Live Life Lighter

Lepicol Lighter is a multi-award winning, scientifically developed, natural food supplement which could assist your customers' weight loss journey. Extra pounds aren't always down to over consumption and lack of exercise; the bacteria in our guts could influence what we crave and how much weight we gain. Lepicol Lighter contains glucomannan, which in the context of an energy

restricted diet contributes to weight loss, chromium to help maintain blood glucose levels and 7 strains of live bacteria to keep the gut healthy. New for 2019 - contact us for a free Health&Wellness Bible with every purchase of Lepicol Lighter. For more information visit www.lepicol.com



Alba Botanica – Volcanic Detox Clay Cleanser (177ml)



Every day our skin soaks in pollutants that gunk up pores and cause complexion chaos. With the powerful extraction action of real volcanic clay, this hypo-allergenic cleanser quickly clears away problematic impurities while an infusion of torch ginger and yerba mata help rebuild natural defences. This Volcanic Clay Detox is also skin detoxifying, hypo-allergenic & rich in antioxidants. Aloha, bright, clean skin!

For more information or to order visit www.kinetic4health.co.uk email sales@kinetic4health.co.uk or call 08450 725 825.



Pure, fresh and 100% organic

Discovered by Tibetan herdsman at high altitude, cordyceps optimises oxygen uptake and delivery to increase vitality and endurance, and supports cardiac function and respiratory health. Organic Mushroom Nutrition is a leading producer of pure, fresh, certified 100% organic, fermented

medicinal mushroom powders that contribute to optimise your health. Having travelled the world to discover unique mushroom varieties, Om have combined the perfect balance of ancient wisdom with modern growing methodology to grow these miraculous mushrooms in their state-of-the-art facility in California. A range of five single blends are now available in the UK: Reishi, Chaga, Cordyceps, Lion's Mane and Maitake. For more information visit www.kinetic4health.co.uk, email sales@kinetic4health.co.uk or call 08450 725 825.

Immune System Support

The human microbiome is a complex ecosystem – a microbial organ – within the gastrointestinal tract. This microbiome is dominated by anaerobic bacteria and these microbes influence

physiological functions (particularly metabolism), local mucosal homeostasis, inflammation and immunity. The most effective probiotic/sporebiotic product to survive and perform fully in this anaerobic environment, supporting digestive and immune function, is MegaSporeBiotic™. Help to support your clients' health more effectively with the Total Gut Health Protocol from Microbiome Labs UK. utilising the best-selling MegaSporeBiotic supplement, the NEW MegaPrebiotic supplement and the NEW MegaMucosa food supplement. Register for a Practitioner or Student account at www.MicrobiomeLabs.co.uk





YOU NEED MORE GOOD BACTERIA



Featuring clinically studied unique strains of live bacteria never seen before in the UK health market.

Formulated by Dr Perlmutter, America's brain-health expert, a board certified neurologist, and an expert in the human microbiome

MODERN APPROACH TO MEN'S HEALTH

With stress, heart health and mental health being high on the list of male concerns, there are some key nutritional considerations in relation to the modern man. The experts discuss the right advice.

ith data suggesting that many men in today's society are not meeting the basic nutritional requirements, it's clear there is work to do in educating portions of the male population when it comes to their health needs. This is despite the fact that men – more often the younger generation – are known to be more conscious of making healthier choices.

So, how as Nutritional Therapists should you approach it? And what are the key issues that clients should be made aware of?

Alice Bradshaw, Head of Nutrition Education and Information at Terranova Nutrition, commented: "The



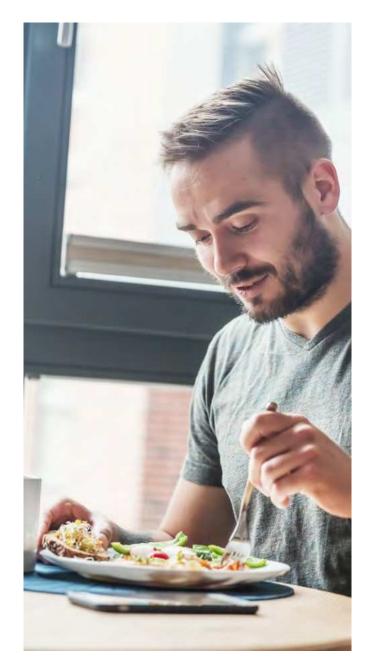
 $\left\{ \right\}$

general state of men's health and their attitude towards health issues is a matter of concern. According to statistics gathered by the British Nutrition Foundation, many men are not even meeting the basic requirements for good health, such as including enough portions of fruit and vegetables and essential fats on a daily basis. Additionally, figures suggest that they are generally consuming too much alcohol and not participating in enough physical exercise.

"The message about health is more mainstream today, so younger men, in particular, are becoming more conscious of making healthier choices. Recently, the NHS revealed that a study involving 10,000 young people in the UK found that almost 30 per cent chose to avoid alcohol consumption, compared to 18 per cent in 2005. Additionally, the incidence of binge drinking showed a similar decline. The wellness movement and the rise of male, celebrity health role models may also be influential for young men. The trend towards plant-based nutrition has also seen the younger generation, including many young men, adopting a vegan diet or just becoming more aware of the importance of balancing their meat intake with more plant-based foods."

Nutritional Therapist, Jenny Logan, Technical Manager at Natures Aid, also pointed out: "Whilst life expectancy has increased in the last 10 years, what has decreased is healthy life expectancy – the number of years lived in good health. According to the latest Government report, the number of years lived in poor health has increased since 2011 and men could now live 16.2 years in poor health. ⁽¹⁾

"Less than a century ago, deaths from infectious diseases were common, and death most often followed a short period of illness. Now though, chronic disease is the leading cause of death, and long periods of moderate and severe poor health most commonly precede death. This is a cause for concern, but it is also the area where



nutritional therapy can offer the best support and preventative measures."

MALE HEALTH CONCERNS

Men's health is changing, and certain issues are becoming more prominent, in part due to the way we live in modern times.

"Men are likely to work with a Nutritional Therapist to address health issues such as stress, fatigue, fertility, mood disorders, digestive issues and cholesterol and cardiovascular problems. Some of these health issues may be exacerbated by typical lifestyle habits that men adopt (working long hours, eating on the run, alcohol consumption etc)," Bradshaw explained.

"Additionally, hormonal imbalances can be aggravated by poor diet and irregular sleep patterns. A Nutritional Therapist may encounter many male health issues that are fuelled by low testosterone levels in clients that consume a low nutrient, sugar-dense diet."

Rose Holmes, Nutritionist, BSc, Dip.ION, PGCE, MBANT, Education and Training Manager at Rio Health, added: "The biggest health issues for men include heart health, respiratory diseases, liver diseases, diabetes and depression. Stress is an important contributing factor to many health issues men suffer. If you ask men what they worry about, heart health, diabetes and weight gain will likely feature in the most common answers. Low testosterone can also be an issue for some men. Symptoms may include low libido, decreased morning erections, loss of body hair, enlarged breasts, low bone mineral density and loss of muscle mass.

"High risk factors for many of these health conditions include, stress, excess weight, smoking, alcohol, poor immunity and unhealthy diet. Stress contributes to most health conditions, particularly so for heart health and libido issues. Dealing with stress needs to be high on the list." Penny Shaw, Nutritional Therapist and Brand Quality Manager at G&G Vitamins, pointed out: "Heart disease is the number one issue for men in the UK, with prostate and bowel cancer following shortly after. Benign prostatic hyperplasia is very common in men. By age 70, 90 per cent of men have some prostate enlargement."

Logan continued: "Certain conditions are more likely in men than in women, this includes problems like diabetes and heart disease. Men run a greater risk when they are younger, as women are offered some protection from this by their hormones. After menopause, the risk factor for women does start to catch up.⁽²⁾ One of the key risk factors for heart disease and diabetes is the development of insulin resistance,⁽³⁾ and this is one of the main areas which nutritional therapy can help to address. Many people who consult with a practitioner will have symptoms of insulin resistance or metabolic syndrome.

"Dietary choices play an important role in this, alcohol, high sugar intake and refined carbohydrates will all increase risk, and men are said to be more reckless and submit their body more readily to risks and challenges from an early age. Nutritional Therapists can offer advice, information and supplements, which would help to prevent these issues."

Logan also turned the spotlight on male mental health.

"The other main health issues men should be encouraged to address are stress, anxiety and depression. Mental health is a major problem, especially in today's fast paced society, and women are more likely to address their mental health, whilst men may look to 'man up' and suffer in silence. Male suicide is the biggest killer of men under 45 – with statistics revealing that 84 men take their own life each week, and of the suicides in the UK, 75 per cent of them were committed by men.⁽⁴⁾ Not seeking help for issues like stress, anxiety and depression is the major risk factor for this," she pointed out.

FOCUS ON THE PROSTATE

The prostate is one of the most critical considerations when it comes to male health, and is certainly something that is growing in awareness.

"Prostate health is essentially important for men. This walnut-sized gland manufactures, stores and secretes (during intercourse) lubricating milky-white seminal fluid responsible for sperm motility and for alkalizing the vaginal canal. The gland doubles in size during puberty, then, from approximately aged 25, begins another growth period, which can become problematic in older age when excessive growth may associate with problems such as frequent urination and loss of bladder function," Holmes advised.

"The prostate surrounds the male urethra (through which urine passes) in a ring-like manner and, when enlarged, it may compress the urethra, causing obstruction to urine flow. The bladder wall may thicken and become irritated, causing frequent urination, and, if very weakened, the bladder may lose ability to empty itself completely.

"By age 50, up to 50 per cent of men have symptoms of enlarged prostate, known as BPH (Benign Prostatic Hyperplasia) and may suffer various symptoms; dribbling, weak urine stream, hesitancy before urinating, sense of incomplete bladder-emptying and frequent night-time urination. Sometimes, there is burning on urination and impotence."

Logan added: "As men age, zinc remains important to support the health of the prostate gland. It could be taken in conjunction with saw palmetto, a botanical supplement which is known to reduce inflammation in the prostate gland, and therefore to reduce the risk or symptoms of Benign Prostatic Hypertrophy.

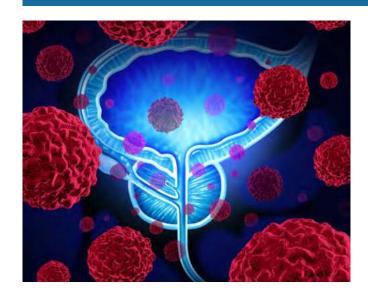
"Include foods like pumpkin seeds in your diet and ensure you are getting enough zinc. If you notice any changes in frequency or duration of urination, get it checked out by a doctor."

IDENTIFY DEFICIENCIES

The experts pinpoint that men can be in need of certain nutrients that they may be lacking.

"Many men are not getting sufficient vitamins and minerals to meet their daily requirements. Magnesium is needed for more than 300 metabolic pathways, including energy production. Studies show that 77 per cent of men are deficient in magnesium. This is important also because low magnesium levels may increase blood levels of C-reactive protein, a marker for heart disease, one of the leading causes of death in men," Holmes explained.

"Men may also be deficient in vitamin D. This is particularly important for men because, in addition to its roles in bone health, mood and immune health, levels of vitamin D are associated with sperm health. Zinc is also



important for sperm health, as well as for testosterone production, which also requires vitamin B6.

"Vitamin C intake also falls short for 60 per cent of adult men. Deficiency of this important antioxidant may impact immune health; vitamin C is also important for stamina and endurance, as well as brain health."

Bradshaw continued: "Men may well be at risk of certain nutritional deficiencies. Key reasons would be simply because they are not regularly consuming food that are rich sources of these nutrients, while simultaneously eating a diet rich in processed foods that may contribute to nutrient depletion. The main nutrients men are likely to fall short of include B vitamins, vitamin D, magnesium, selenium, zinc, omega 3 fatty acids and potassium."

And are these different compared to women, or is the advice generally the same?

Bradshaw advised: "In general, men require more energy (calories) from food, as well as more macronutrients than women. This is due to their larger body mass. More specially, men need to ensure that they have the adequate nutritional factors that contribute to testosterone production (a hormone that acts as a significant regulator for many functions). These specific nutrients include vitamin D, zinc and magnesium. Additionally, men will need less iron and calcium than women."

In terms of addressing such deficiencies, educating men over the kind of foods they should be eating is crucial as there can be a lack of awareness in this area. Men also have a different approach to what they eat compared to women.

Logan explained: "Men, particularly younger men, tend to act as if they are invulnerable. This can lead to destructive behaviours, such as drug or alcohol binges, and poor food choices. It has been reported that women tend to have better knowledge of food and nutrition and are more prone to go on a diet. ⁽⁸⁾ More generally, women are reported to have higher intakes of fruit, vegetables and dietary fibre, alongside lower intakes of fat and salt, conferring greater importance to healthy eating.⁽⁹⁾

"In many Western societies, eating meat has always been linked to strength and masculinity. This is thought to be another reason why men eat less fruit and vegetables, regarding them as being healthy foods women eat because they want to lose weight. Men want to build muscle, so they eat meat. Media and advertising have long played a role in this perception of meat as a man's main food. Nutritional Therapists can guide and educate to change this perception, helping to support men into making better more balanced food choices, which will support mental health, heart health and blood sugar balance.

And Shaw continued: "Men require a greater quantity of calories per day and their fat consumption should primarily be sourced from fish and vegetable fats from olive oil.Iron stays in the body so whilst women regularly get rid of iron via their monthly cycle, men should watch their iron levels to avoid toxicity."

Bradshaw added: "Useful nutritional advice for men would focus on including more fresh wholefoods in their diets (vegetables, pulses, fruit, nuts, seeds, oily fish and wholegrains), while reducing processed and packaged foods, sugar, alcohol and caffeine. It's important that advice demonstrates the simplicity and impact of making small changes over a long period of time, rather than a radical immediate dietary overhaul. A practitioner can also explain how some basic nutritional supplements can help to bridge any nutritional gaps and be of benefit to health."

Holmes continued: "Men often prefer a no-nonsense approach so keeping it simple is important. The simple, most basic advice that has to be given is to eat healthy foods (e.g. fresh vegetables, fruit, oily fish, organic chicken and wholegrains) and limit or don't eat less healthy foods (e.g. sugar, simple carbohydrates, white pasta, white bread, alcohol, processed foods). In addition, drink plenty of fresh water. Men often appreciate being given straight substitution choices like 'choose poached salmon instead of a beefburger' or 'grilled chicken instead of pork pie' or 'homemade flapjack instead of chocolate cake' or 'drink yerba maté tea instead of sports energy drinks'."

IN CLINIC SUPPORT

In terms of the nutritional recommendations you could make to male clients, there are some general guidelines that are worthwhile bearing in mind, and then adding in some specifics.

"In terms of supplements, men often appreciate oncea-day products. A good one-a-day multivitamin/mineral makes a great foundation. A multivitamin spray makes an easy, convenient way to get essential vitamins and can fit in a pocket, briefcase or gym bag to ensure compliance," Holmes suggested.

"Saw palmetto, important for prostate health, may aid hormone balance by helping to prevent the conversion of testosterone to its more potent form, DHT, high levels of which are implicated in male head hair loss and increased body hair growth. Saw palmetto may also help to excrete DHT or reduce its activity in the body."

Bradshaw agreed, adding: "A practical starting point for many men would be a comprehensive multivitamin and mineral supplement. A good formula would include those key nutrients that support men's health but will not contain iron or large amounts of calcium. Additional supplementation could include those key nutrients that men are more likely to fall short on (vitamin D, magnesium, zinc). If there are specific health issues, such as prostate or cardiovascular health concerns, then more targeted supplementation may be helpful. For example, as men age, they may find a prostate supportive formula beneficial. 🏷 MALE HEALTH

Nettle, lycopene and zinc are typical ingredients found in these supplements. Many men may also benefit from adaptogenic nutrients and botanicals, such as rhodiola or supplemental mushrooms."

Logan highlighted the importance of mineral support for male health.

"Most men are at risk of low zinc levels, this is especially true of young men and boys going through puberty. This is because the prostate gland, sexual development and the production of sperm all require this vital mineral, which is recognised as being low in most diets. ⁽⁵⁾ Another mineral which is needed for healthy sperm production is selenium. This mineral is again recognised as being low in many diets, due to its depletion from the soils worldwide.⁽⁶⁾ Low selenium levels have been linked to an increased risk of cancers and heart disease. This is why a selenium supplement with zinc is one of the key supplements men can use to support their health," she explained.

And vitamin B12 is also a necessary consideration.

"Anyone who regularly takes antacid medications, or those on omeprazole or lansoprazole, will also be at risk of developing B12 deficiency. Stomach acid is essential for health production of intrinsic factor, which is required for effective B12 absorption. Medications which suppress stomach acid will often therefore cause B12 deficiency. This is particularly important because B12 supports the nervous system and normal psychological function," Logan advised.

Shaw also highlighted fats.

"Omega 3 supplements are a great choice for men as they keep cholesterol and blood pressure at a healthy level," she explained, adding: "Vitamin D is important, having immunomodulatory effects and hormone balancing, it helps to maintain normal testosterone levels." And don't forget CoQ10.

"Coenzyme Q10 is very important for energy production, for helping the body and every cell to perform all its functions. CoQ10 is found in particularly high levels in the heart muscle, which needs plenty of energy. It is also an important antioxidant and may protect fatty substances in the body (for example, cell membranes and LDL cholesterol) from oxidative damage by free radicals. CoQ10 may, too, be involved in sperm health," Holmes advised.

Logan agreed, adding: "CoQ10 remains important throughout life, for younger men it helps to improve sperm motility, as they age, it would also help to protect against heart disease and high blood pressure, as well as helping to ensure healthy energy production. Dose levels may need to increase with age, for example, 30mg would probably suit a younger man, whilst 100mg may be more appropriate with age."

If libido is a cause for concern, Holmes suggested recommending natural boosters, including maca, muira puama, damiana and catuaba.

Logan continued: "Don't suffer in silence or worry about embarrassment. Talk about mental health issues, seek help and support. Don't be embarrassed about libido or erectile issues, there are many products out there, including arginine and ginseng, which could help. The sooner you realise you are not alone, and that help is available, the sooner you can start to feel better.

"Watch your waist line – this does not mean going on a diet, but an increased waist circumference is linked to the development of diabetes, so stay as fit and active as possible, try and eat healthily, be moderate with alcohol and try to keep that waist size down. Engage with sensible, regular activity and exercise, to look after the health of the heart and reduce the risk of developing Type 2 diabetes."



Nutrition Product Showcases

Garden of Life Microbiome Formula Once Daily Men's

Formulated by Dr.Perlmutter, a certified neurologist with an expertise in the human microbiome. This unique 'shelf stable' formula specifically designed for men has the most exceptional blend of 15 strains of live bacteria to reflect the body's natural diversity, it providing clinically proven strains to support men's



immune system while also providing digestive support. The convenient 'one capsule a day' provides 50 billion live bacterial cultures that are resistant to antibiotics, stomach and bile acid. Complemented with certified organic and non-GMO prebiotics, it provides ultimate digestive comfort especially for those suffering from bloating related symptoms. Free from any artificial ingredients, the formula is hypoallergenic being dairy free, gluten free and soya free. Available at health stores nationwide and www.kijaniliving.com

Garden of Life, Men's Multi 40+

Mykind Organics is a bespoke whole food multivitamin made from real, nutritious foods that are certified organic, non-GMO project verified, vegan, gluten-free and is specifically formulated to meet the needs of more mature men. Men's multi 40+ supports overall health and wellbeing but more specifically good energy levels, healthy bones, a healthy heart, prostate and immune system. Made with the Clean Tablet Technology - the 1st ever 100% real food approach to

tablet making and completely devoid of artificial ingredients. Just two tablets a day, will give men over 40, meaningful doses of the most bioavailable nutrients required for optimum absorption. For more information or to order visit www.kijaniliving.com or call 08450 725 825

Aloe Dent Charcoal Toothpaste 💉

AloeDent's main ingredient is Aloe Vera

which is packed full of soothing nutrients

which play a role in helping to keep gums healthy Combined with a blend of carefully selected natural, active ingredients

 Fluoride free & SLS free • Natural peppermint & menthol flavour

- Aloe Vera helps soothe gums Tea Tree Oil natural antiseptic
- Charcoal naturally whitens & removes impurities
- Silica for natural whitening Icelandic moss for natural whitening
- Stevia natural sweetener Horse Chestnut anti-inflammatory
- Menthol natural flavour

For more information visitwww.optimah.com



Pro-Ven for Adults

Not all probiotics are equal. Pro-Ven Probiotics contain the comprehensively studied Lab4 and Lab4b groups of bacteria, which have been developed by Dr Nigel Plummer and shown in clinical studies to support immunity and digestion in adults, children and babies. Using proprietary production processes that ensure the stability of the live bacteria in combination with appropriate vitamins, minerals and other nutrients, the Pro-Ven Probiotics



Adult Acidophilus & Bifidus - 25 Billion'



products are specifically designed for every lifestage. Pro-Ven Adult Acidophilus & Bifidus – 25 Billion is suitable for vegetarians, gluten free and free from dairy ingredients. A pack contains 30 capsules, each providing 12.5 billion Lab4 bacteria. For more information or to order visit www. provenprobiotics.co.uk



BETAINE HCI

Encapsulted Betaine HCI

Betaine HCl promotes hydrochloric acid in the stomach. Hydrochloric acid can decline as we age or as a result of a busy lifestyle or reduced digestive function. It is needed to breakdown ingested food and kill off harmful bacteria or pathogens which can lead to illness and disease. Betaine HCl can activate pepsin, the enzyme required for the breakdown of protein and supports the extraction of B12 from chyme. G&G's Betaine HCl is

encapsulated in their own Sussex-based cleanroom, and each vegetable capsule contains only Betaine HCl in a base of steamed rice flour. For more information visit www.gandgvitamins.com



INTEGRATED ECZEMA PLAN

Dealing with eczema involves a multitude of factors. With focus placed on nutrition and toxic load, *Nutrition I-Mag* offers potential protocols that could be applied in clinic.

Czema today now ranks as one of the most common skin conditions, affecting growing numbers of people, most notably, children. The reasons for this are varied, and in some cases, can be complex, but what isn't in dispute is the combined effect that poor nutrition – even before birth – and external pollutants has on raising our risk. For many experts, the rise can be related to the way that we live our lives these days.

"The incidence of eczema has been increasing over the past 40 years. The National Eczema Society quotes that in the UK, one in five children and one in 12 adults has eczema. Eczema can affect people of all ages but it is commonly seen in children," advised Natalie Lamb, Nutritonal Therapist and Technical Advisor at ADM Protexin, which manufactures the Bio-Kult and Lepicol



brands.

"Although starting in early childhood, 90 per cent of cases will not continue into adulthood. Infants are born with a thin, fairly permeable skin layer, which develops and grows over the first two years of their lives. This is, therefore, much more sensitive to the environment and much more prone to damage than in adults."

ſ'nÌ

Jenny Logan, Nutritional Therapist and Technical Training Manager at Natures Aid, pointed out: "It has been estimated that up to 15 million people in the UK could be living with eczema.⁽³⁾ Information shows that in 2015, GPs in England wrote about 27 million prescriptions for the topical agents used in the treatment of atopic dermatitis (eczema) at a cost of approximately £169 million.⁽⁴⁾ There are often genetic drivers, with most eczema sufferers



having at least one parent who also suffers. It commonly occurs in infants, but can affect children and adults as well."

Jenny Bodenham, Nutritional Therapist at Higher Nature, added: "Recent statistics show that atopic eczema, also known as atopic dermatitis, is the most common form of eczema in the UK, affecting up to 1.5 million people across the country.⁽¹⁾ Eczema affects between 10 to 20 per cent of all infants, but almost half of these will 'grow out' of eczema between the ages of five and 15."

CONDITION SPECIFIC

Rose Holmes, Nutritionist and Education and Training Manager at Rio Health, advised: "Eczema is a chronic inflammatory skin disorder, which manifests as sore, dry, red, itchy skin. The condition involves both reduced skin barrier integrity and immune dysfunction. Nutrients needed for connective tissue support and immune health, therefore, are very important. Massive overproduction of IgE occurs in eczema. These attach to the surface of mast cells, triggering histamine and potentially increasing the risk of microbial infection."

And Bodenham went on: "Eczema is a chronic inflammatory skin disorder that causes the skin to become sore, scaly, dry, red and itchy. It is believed that a combination of genetic tendency and environmental/ nutritional triggers are involved. In more severe forms, the skin can become broken, raw and bleeding. Although it can sometimes look unpleasant, eczema is not contagious."

"It can occur along with poor immune function, asthma, hay fever, uticaria and migraine. In atopic eczema, there is sensitivity to allergens in the environment, which are harmless to others. Other types of eczema are caused by irritants, such as chemicals and detergents, allergens, such as nickel, and yeast growths."

Evelyn Liddell, a Pharmacist and Head of Training at Weleda UK, explained: "Eczema is the name given to a group of very common skin conditions and generally it describes dermatitis, which means inflammation of the skin. There are several types of eczema; most commonly, there is atopic dermatitis and contact dermatitis.

"Eczema can occur at any age and the onset is often in early childhood. It is generally thought to be linked to an over-sensitive immune system.

"The term 'atopic' is used to describe a predisposition or inherited tendency to develop allergies, and often those who suffer with atopic dermatitis also experience hay fever or asthma. Most infants who develop the condition outgrow it by their 10th birthday, while some people continue to have symptoms on and off throughout life."

And Lamb advised: "Eczema is an allergic skin condition



associated with a malfunction of the immune system, in which harmless environmental or food substances are interpreted as being harmful, causing the immune system to react incorrectly towards them.¹

"Acute attacks can cause crusty scales or blisters that ooze fluid. Constant scratching can cause the skin to split and bleed, leaving it open to infection. Children typically have eczema in the crooks of their elbows, and behind their knees and ears, whereas in the teen years and 20s, the eruptions are frequently on the hands and feet, and in older age, the eruptions often occur on the legs and arms."

MODERN INTERFERENCE

It is generally agreed among experts that our modern way of living, in too clean, sterile environments, is actually increasing the prevalence of eczema.

"The 'hygiene hypothesis' is one theory that suggests the sterile environment of the Western world has reduced our interaction with a wide range of microbes and necessary stimulation to enable a healthy development of the immune system.² This possibly results in an imbalance between Th1 and Th2 type immune responses that favour the development of IgE-mediated allergies3," Lamb explained.

"Another concern is that our modern lives are full of an increasing array of man-made substances that we use in our homes, on our skin and in our food and water supply that perhaps we have not adapted well to. Natural sea water is said to be very healing on the skin and natural sunlight, essential to support the skin's production of vitamin D, essential to support a healthy immune response. Neither of which we get much of these days."

Bodenham added: "Researchers have found that exposure to antibiotics in the first year of life is more common in children with eczema ⁽²⁾. Whilst the benefits of the antibiotics in protecting against infections is clear, it may be the case that the reduced requirement of the

immune system to mount a strong immune response against infection, contributes to increased reaction to allergens. Additionally, antibiotics reduce our friendly gut bacteria, which play an important role in our body's immune defence. "

There are contributory factors known to come into play too, with hereditary factors, sensitivity to external irritants, such as washing powders, cleaning fluid, wool, as well as house dust mite, cat or dog fur, early weaning onto wheat, dairy, eggs and stress.

Logan added: "These allergies are strongly linked to leaky gut issues, poor immune function, a disordered microbiome and a prevalence of *Staphylococcus aureus* on the skin⁽²⁾."

THE NUTRITIONAL LINK

There is no doubt that nutrient status and deficiencies can be linked to raised risk of this skin condition.

Logan explained: "There are several direct links between the development of eczema and nutrition. Food allergy plays a big role in eczema, and the identification and elimination of allergens can play a very effective part in treatment. ⁽⁵⁾ Additionally, patients with eczema are thought to have altered essential fatty acid metabolism, with low levels of EPA and DHA, which leads to increased inflammation, a greater tendency to allergies and dry skin, all of which are linked with the development of eczema. ⁽⁶⁾

"The microbiome also plays a vital role in eczema. A healthy microbiome can help to keep skin pathogens under control, whilst an unhealthy microbiome can lead to leaky gut, food allergies and an increase in inflammation and eczema. Nutrition plays an important role in the health of the microbiome ⁽⁷⁾."

And, in fact, we must not forget just how big a role the gut has here.

"Conditions such as eczema are said to be a

malfunction of the immune system. The gut lining houses approximately 70 per cent of the body's immune cells,⁴ and is lined and influenced by a diverse microflora that play an important role in the development and function of the corresponding immune system.⁵ Specific beneficial strains appear to stimulate more regulatory or calming immune cells ⁶." Lamb explained.

"An imbalanced gut flora is commonly seen in those with eczema and thought to have a pivotal role in the condition. The bacteria *Staphylococcus aureus* is frequently isolated from the skin of atopic dermatitis (AD) patients during flares.⁷ The normal microbiota is disrupted and the diversity of the microorganisms on the skin is reduced and many species that produce inhibitors of *S. aureus* growth decline.⁷ Eczema is often characterised by chronic inflammation and intestinal permeability. Current treatment is to suppress this immune response with various medications. However, as this is the same defence mechanism the body uses to protect us from truly harmful pathogens, their long-term use may not be ideal."

She continued: "The skin is a complex organ in the body that requires a wide range of micro and macro nutrients to be able to function optimally. The health of our digestive system is important to ensure that food is broken down adequately so it can be delivered by the blood to the skin.

"Good quality protein is the building blocks of the body and is needed for connective tissue in the skin and good quality natural fats are essential for the cells that line the sub dermis, providing insulation and holding moisture in the skin. Fat soluble vitamins A, D and E play vital roles in skin health, have strong antioxidant properties and support a healthy gut lining too. Reducing inflammation is key in inflammatory conditions such as eczema. High insulin due to poor blood sugar control affects prostaglandin pathways, increasing inflammation."

There may also be issues with nutritional deficiencies



that warrant further investigation.

"Eczema sufferers may have multiple nutritional deficiencies due to food allergy and leaky gut issues, which would negatively impact absorption," Logan advised, adding: "Many eczema sufferers have been shown to have zinc deficiency.⁽⁹⁾ This mineral is low in many diets, and is important both for the normal functioning of the immune system and the health of the skin. Additionally, zinc plays a vital role in fatty acid metabolism."

In terms of the dietary guidelines a sufferer should follow, the strategy can be relatively simple, yet effective.

"I would advise cooking a wide range of colourful natural wholefoods from scratch. Reducing intake of sugar and refined carbohydrates, while increasing intake of slow release carbohydrates, natural fats and proteins, will help to balance out blood sugar and insulin release. Cook with anti-inflammatory spices such as root ginger, garlic, turmeric, chilli and rosemary and enjoy drinking green and nettle tea," Lamb suggested.

Logan continued: "A diet high in processed foods and sugars increases inflammation, both directly and because of the negative impact it has upon the microbiome. These highly processed, refined foods also lack important nutrients, which can leave the body depleted in zinc, vitamin C and selenium, all of which are vital for the healthy functioning of the immune system – therefore, in the prevention of allergic and inflammatory responses.

"Due to the issues around fatty acid metabolism, ideally, they would follow a diet rich in easily accessible essential fatty acids – including plenty of oily fish, to maximise EPA and DHA intake. Allergies to milk, eggs and peanuts account for up to 81 per cent of all cases of childhood eczema, so effective treatment involves the identification and elimination of these food allergens. An elimination diet can therefore be very helpful⁽⁸⁾."

Holmes focused on issues around food sensitivities. "Food sensitivities and gut permeability may be factors as can essential fatty acid imbalance, nutrient deficiencies, environmental triggers and, very importantly, stress," she explained. "In addition to an anti-inflammatory diet rich in antioxidants and organic whole foods, an elimination diet may help to determine food sensitivities – gluten and dairy are common food insensitivities. Healthy fats should be included. Sugar should be avoided.

"Ensuring optimal detoxification is important, as well as limiting toxin exposure. Skin is one of our detoxification routes."

Bodenham recommended: "Avoid red meat and dairy – include healthy protein sources such as chicken, fish and beans. Increase foods that promote gut flora balance – leeks, garlic, fibrous vegetables, fermented foods. Drink plenty of water/herb teas through the day (one to two litres water a day). Include more sulphurous foods in the diet, such as garlic and onions."

EXTERNAL FACTORS

It's not just a person's nutritional status that plays a key role in the condition; both what we put on our skin, in addition to other factors, such as external pollutants, is a crucial consideration.

"Contact dermatitis is commonly a result of the skin being in contact with a skin irritant. Beware, skin irritants are often present in the most surprising personal care products! Unfortunately, there is no cure for eczema but, with proper treatment and a considered approach, the disease often can be controlled," Liddell explained. Knowing what triggers an eczema-type response will define how to manage the condition. So, what is the course of action?

"Simplification of any skin care regime is key to managing eczema prone skin," Liddell advised. "The fewer ingredients you expose your skin to, the fewer opportunities there are to trigger an inflammatory response. Try using cosmetics less frequently, and be aware of how much product you need versus how much you habitually use!"

She also advised people to use fewer products

"Using fewer products is another way of reducing possible triggers to response. Multitasking products really show their true colours here. Use gentle cleansing products; natural sebum secretions are skin balancing and offer your skin protection. Be conscious of not 'over-cleaning' your skin, thus making it vulnerable and having to work hard to re-establish balance. Choose products with gentle plant cleansers like sodium cocoyl glutamate over harsher synthetic alternatives, such as sodium lauryl sulphate and sodium laureth sulphate," Liddell advised.

Natural is also considered best.

"Choose products that are certified natural or organic that bear a respected seal, such as NATRUE. That way you are selecting products that contain 100 per cent certified natural ingredients, avoiding troublesome synthetic ingredients, such as artificial fragrances. There is a long list of synthetic ingredients commonly in personal care products that are prone to irritating your skin," Liddell added.

Holmes agreed, and recommended healing rosehip.

"It is essential to choose appropriate skincare. Rosehip seed oil, with its high concentrations of essential fatty acids, antioxidants and a form of vitamin A called trans-retinoic acid, has shown ability to restore and rejuvenate skin. This may be beneficial also for scarring from eczema. Choose a 'no-nasties' skincare range that is 100 per cent natural and suitable for all skin types," she commented.

SKIN SUPPORT

Supporting dietary changes can involve certain nutritional supplements that are known to be beneficial to the factors associated with eczema.

Gut support should be high on the list of priorities.

"In some studies, probiotic supplementation has been seen to rebalance the gut flora, improve immune function, reduce severity of symptoms and reduce the need for medication," Lamb advised.

"In 2011, Farid et al⁸ found that a multi-strain probiotic (Protexin) significantly reduced eczema symptoms in infants and young children within just eight weeks. In 2012, Drago et al,⁹ showed *Lactobacillus* to reduce symptoms of eczema in adults, to rebalance the gut flora and reduce production of Th² cytokines, while maintaining production of Th1 cytokines. More recently in 2014, Allen et al,¹⁰ showed a multi-strain probiotic to reduce the incidence of atopic eczema in early childhood when given to 344 pregnant women and their infants to age six months."

Logan added: "Supplementation with specific good bacteria could also be very helpful. A combination providing *Lactobacillus plantarum*, *Lactobacillus reuteri* and *Lactobacillus rhamnosus*, was found to be effective at supressing *Staphylococcus aureus*, the bacteria prevalent on the skin in eczema sufferers. The same study also showed these bacteria to be effective at reducing the inflammatory response. ⁽¹¹⁾ *Lactobacillus plantarum* has additionally been shown to be effective for treating leaky say gut."

What else should be incorporated?

"Fish oil supplements would be particularly useful to provide the direct EPA and DHA required. In the case of eczema sufferers, because of the issues they have with fatty acid metabolism, fish oils have been shown to be more effective than flax oils," Logan explained. "Clinical improvement in the eczema condition associated with the supplementation of fatty acids directly correlates with the increase in DHA in the serum phospholipids, which is achieved more effectively with fish oil supplements.⁽¹⁰⁾

"Zinc supplements may also be indicated in the treatment of eczema, as low zinc levels are common in eczema patients. Also, zinc is required for the metabolism of fatty acids."

Holmes suggested curcumin, commenting: "Curcumin may help as it is both anti-inflammatory and potent antioxidant. Vitamin D3, vitamins A and E, vitamin C, zinc and selenium are important for immune support. Quercetin may help as it is a powerful antioxidant and has positive influence on immune system balance and mast cell balance, showing ability to inhibit histamine release."

A check on lifestyle factors is also to be recommended.

"Stress reactions can increase inflammation, and emotional tension has been shown to aggravate itching in eczema sufferers. Practitioners should also therefore be advising on lifestyle measures which help to promote positive stress management, including breathing techniques, pilates and yoga," advised Logan.

RESEARCH UPDATE

Eczema is a condition that has been studied widely, with much interesting research helping us understand the nutrition link.

Bodenham highlighted research around nutrition, commenting: "According to research published in the *European Journal of Clinical Nutrition*, children with the highest average intakes of beta carotene, vitamin E, folic acid and iron have significantly lower risks of eczema. The researchers suggest that the nutrients are likely to be acting as antioxidants, helping to protect the skin from free radical damage and reducing inflammation⁽⁴⁾.

"And, a meta-analysis was conducted to examine all published RCTs of synbiotics for the treatment of AD, using the SCORAD index to evaluate efficacy⁽³⁾. It was concluded that the use of synbiotics for at least eight weeks with mixed-strain bacterial species had a significant effect on improving the SCORAD index in children aged one year or older. Conversely, probiotics containing single strains of bacteria did not show a significant effect. Further studies are required to determine target populations, bacterial strains, types of probiotics and prebiotics, and optimal dosing protocols."

Logan advised: "Some of the most interesting research has been carried out on the link between the health of the gut and the health of the skin. Nutritionists have long linked an unhealthy digestion with skin issues, and this research is vindicating this belief. The gut-skin axis has been the subject of much research as the interest in the impact of the microbiome has exploded. This research has shown that supporting and manipulating the microbiome can offer an effective treatment protocol for skin conditions, including eczema, acne and psoriasis⁽¹³⁾."

Nutritiôn Product Showcases

From Birth and Beyond

Bio-Kult Infantis is an advanced multi-strain formulation for babies, toddlers and young children. Each sachet contains seven strains of live bacteria, proven to survive the high stomach acidity. These strains help to reduce diarrhoea in gastroenteritis, improve constipation and improve symptoms of eczema. Infantis contains omega 3 believed to contribute to early brain development and cognitive function, as well as perplex, DHA and EPA, all high in omega 3 fatty acids. Infantis also contains vitamin D_3 that helps to contribute to the normal function of the immune system and is needed for normal growth and development of children's bones. **or more information visit www.bio-kult.com**

Glucosamine Joint Complex Gel

Optima Joint Complex Gel is a carefully designed formulation that may help to maintain healthy joints, bones, muscles, tendons and ligaments. Glucosamine is well documented for its positive effect on joint health and in this unique

formulation is combined with Devils Claw, MSM, Menthol and Essential Oils. Initial application creates a pleasant cooling effect due to the menthol content, whilst the essential oils aid circulation to the skin resulting in a warming sensation.

For more information call 01792 646475 or visit www.optimah.com



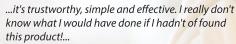
Bio-Kulf

io-Kull

(1)

Waterfall D-Mannose®

The Award Winning Bladder Supplement with Dedicated Customer Support.



Naterf

Rosie

 \star \star \star \star

📩 Trustpilot

Being able to tackle these intimate problems yourself with a natural product like this is very reassuring and empowering.

Patricia

 \star \star \star \star

★ Trustpilot

Sweet Cures has over 17 years' experience in the supply and distribution of glyconutrients. Please visit our website to see our full range of supplements, probiotics and testing kits.



sweet-cures.com 01904 789559

EXPERTADVICE

Our panel of nutritional experts offer readers advice on dealing with a variety of issues.

Can you explain the benefits of recommending oral sprays to my clients?

ASK THE EXPERTS

ROSE HOLMES ADVISED: Oral sprays are an excellent delivery method for nutrients. Micro-dropulets sprayed onto the highly permeable soft tissue of the oral cavity delivers nutrients to a veins-rich area, from which these may quickly enter the circulatory system. By direct delivery to the bloodstream, nutrients in oral sprays bypass the digestive system, where many nutrients may be lost. Individuals with digestive inefficiencies, including inflammatory gut conditions, IBS, colitis, Crohn's and coeliac, thereby have better opportunity to benefit from oral-spray-delivered nutrients. Those with low stomach acid (needed particularly for mineral absorption) may also benefit. Levels of stomach acid are thought to decrease with age so older individuals may benefit by use of orals sprays.

Vitamins D3 and B12 have both shown effective absorption rates when oral spray-delivered. Permeation studies show overall better delivery across sublingual (under the tongue) membranes and buccal (inner cheek) membranes and, when compared with soft gelatin capsules, vitamin D3 buccal spray produced a significantly higher mean serum 25(OH)D (best way to measure vitamin D in the body) concentration in both healthy subjects (1.9 times higher) and those with malabsorption syndrome (2.6 times higher).¹ Under-the-tongue delivery of both nutrients and medications have shown distinct advantages for absorption, offering direct delivery, quick onset of action, reduced negative side effects and high efficacy from lower dosesⁱⁱ.

Vitamin B12 is a large molecule, which relies on the presence of intrinsic factor (a glycoprotein secreted by the stomach's parietal cells), to enable absorption from food in the small intestine. Pernicious anaemia is an autoimmune disease in which, due to deficiency of vitamin B12 (caused by lack of intrinsic factor), insufficient red blood cells are produced. B12 deficiency may be caused by gastric bypass surgery, abnormal bacterial growth in small intestine and tapeworm infection. Deficiency may also result from inadequate intake (B12 mainly found in meats, eggs and milk); vegetarians, and especially vegans, may be deficient. Good vasculature means sublingual and buccal delivery are effective methods with faster onset action.

Coenzyme Q10, for which deficiency has shown association with gum disease, may also be beneficially delivered directly to the oral cavity, where contact with periodontal tissue is direct and immediateⁱⁱⁱ.

In addition to providing superb absorption (often using the most bioavailable forms of nutrients), and faster onset action, oral sprays are convenient to use so may increase client compliance.

Studies indicate vitamin D3 sprays may absorb best via the inner cheek, whilst studies on B12 mainly discuss sublingual application. Other factors to bear in mind are oral sprays may be most efficient if used away from smoking, eating and drinking for at least a brief time either side of application. Mouth spray formulations deliver direct, act fast and are conveniently best choice in many cases.

REFERENCES



THE EXPERT



Rose Holmes, Dip.ION, BSc (Hons), PGCE, mBANT, CNHC is a Registered Nutritional Therapist with a special interest in chronic illness, circadian rhythm disruption and healthy ageing. She is the Education and Training Manager at Rio Health and provides training to other practitioners and health professionals on natural therapies. \circlearrowright ASK THE EXPERTS

What is the new research regarding the effects of dying epithelial cells on immune health and what can be used to influence this?

SUE MCGARRIGLE EXPLAINED: Maintaining the integrity and normal function of epithelial cells is a primary factor in staying healthy. Epithelial cells mainly function as an interface or lining of the body's surfaces, forming an integral part of immune protection and many of the body's systems. They also fulfil many specific roles, such as acting as a barrier or facilitating absorption, as well as secretion. Epithelial cells detach and die via apoptosis and especially in large numbers at barrier surfaces, such as the gut.

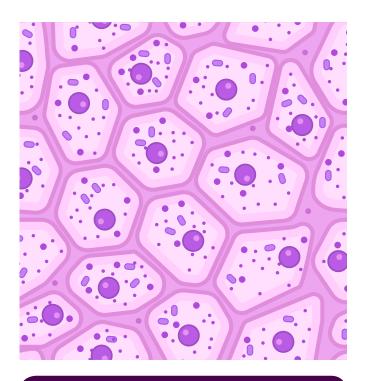
Until recently, it had been unclear whether this has had any specific effects on health. A recent study, however, has shown that dying epithelial cells are not just waste for the body to get rid of but instead, can actively influence their environment. Immune cell-dendritic cells are mediators of the effects of commensal bacteria promoting T-reg cell proliferation but dying epithelial cells can block this action through phosphatidylserine on their surfaces, which interacts with dendritic cells and stops their production of interferon-ß. T-reg cells are important for controlling immune responses and maintaining self-tolerance, therefore, blocking their proliferation can lead to inflammatory and allergic diseases.

Substrates from various nutritional compounds found in dietary foods and whole herbs support the role of epithelial cell activity and function. These include luteolin and apigenin from dandelion leaf and dandelion root, milk thistle and chamomile. *Lactobacillus plantarum* supports the biological availability and activity of such plants and has a protective effect on tight junction associated proteins and biological structure maintaining epithelial cell integrity.

And what are some of the nutritional factors produced by the interaction of probiotics with foods which have far reaching and significant effects?

There is a high level of variation in gut flora on a day to day basis and the intake of prebiotic fibre can be beneficial. However, there are other nutritional factors, such as soluble pectins, which, due to their complex structure (an example being apples and pears), display many different biological activities when modified by colonic bacteria. One of these activities is the production of the short chain fatty acids, such as butyrate, which provides ideal pH conditions for the indigenous flora. Butyrate is utilised by mitochondria as an energy source through fatty acid metabolism and controls bowel inflammation and movement. Another is the binding of modified pectin to prevent overexpression of Galectin-3, a protein found throughout the body, which plays an important role in cellular function. Plant foods such as pomegranate induces its effects through various metabolites. These include luteolin glycosides, punicalagin, quercetin and the hydrolysis of ellagitannin to ellagic acid and urolithins as microbial metabolites of ellagic acid. Urolithin A is not known to be found in any food source, it can help restore mitophagy in cells and with ellagic acid, is important for colonic cell health.

Arabinogalactans, when combined with friendly micro-organisms, also promote the growth of indigenous intestinal microflora and generate high concentrations of short chain fatty acids, which affect inflammatory responses, as well as interacting with the immune system to express balancing effects on a range of immune cells.



THE EXPERT



Sue McGarrigle ND DipION CNHC mBANT NNA is a Clinical Nutritionist and Naturopath and has practiced since 2001. Sue works for Bionutri, advising and helping practitioners in their various practice matters. As a lecturer to college and university students to Masters level. Sue

has trained hundreds of healthcare and medical practitioners in many aspects of nutritional therapy. She writes as a regular contributor of specialist nutrition articles for magazines and newspapers and has been a guest speaker at various national conferences.

Train to be a Nutritional Therapist

At CNELM, we teach undergraduate and postgraduate courses in nutrition validated by Middlesex University:

- BSc (Hons) Nutritional Science*
- MSc/PG Dip in Personalised Nutrition*

* Accredited by the NTEC for nutritional therapy practice in combination with CNELM's Nutritional Therapy Practice Diploma

Available for full or part-time study and Distance Learning

Short courses in Nutrition and Coaching also available:

- Nutrition Coach Diploma
- NLP Practitioner

Course Enquiries: Centre for Nutrition Education & Lifestyle Management (CNELM) T: 0118 979 8686 E: info@cnelm.co.uk www.cnelm.co.uk

Become a CNM Natural Chef

College of Naturopathic Medicine

Study part-time

Diploma Course includes:

- Food fundamentals
- Natural Chef techniques
- Food for Health

to find out more!

- Therapeutic menu & recipe writing
- Building a culinary career

CNM is the UK's leading college for natural therapies

Attend an Open Evening

New! Vegan Natural Chef

01342 410 505 info@naturopathy-uk.com

www.naturopathy-uk.com

Join the NNA as a Nutritional Therapy Student or Qualified Therapist



Centra Tor Namitian

Education & Lifestyle

Management

The Naturopathic Nutrition Association welcomes all Naturopaths and Nutritional Therapists who have an interest in naturopathic principles and recognise the holistic approach to health and wellbeing. You may join at any time of the year.

Member benefits include:

- Free listings on our Register of Therapists and Searchable Public Database of member therapists
- Special discounts and promotions including Insurance, Testing Services, IHCAN, and other CPD events
- Options to register with CNHC and GNC
- Access to the Natural Medicines Comprehensive Database
- Unique opportunity to upgrade to Registered Naturopath (ND) with the GNC

www.nna-uk.com | info@nna-uk.com | 01908 616543

NNA Mentoring Programme

Joining as a student you gain access to our highly regarded mentoring programme specifically targeted at recent graduates and students in the final year of their diploma. The programme is designed to help you set up in practice, hone your clinical skills and address any questions that may arise.



INSTITUTE OF HEALTH SCIENCES

CI Level 4 Diploma in Nutrition & Lifestyle Coaching (VRQ)

The only Ofqual Regulated Nutrition Coaching Programme

Professionally Recognised, Academically Certified Practitioner Training

Enrolling now for in-class London, Dublin, Cork & Online

info@ihsuk.com	0845 568 7000
info@ihsireland.com	00353 (0)1 531 1150

FOCUS ON VIANIN D

It's one of the most commonly discussed vitamins, yet many people are known to be at risk of deficiency. Here, Nutritional Therapist, **Katherine Pardo**, examines the latest research around vitamin D.

eported cases of vitamin D deficiency have been increasing in incidence, not just in the UK, but on a global scale, and even in countries where sunlight exposure is high.

The long-term public health impact of widespread low vitamin D is of significant concern, especially since we now know that vitamin D acts not only on the skeletal system but on almost every other body system too; an idea fully supported by the identification of the VDR (vitamin D receptor) in nearly all tissue types throughout the body. A recent meta-analysis, involving more than 500,000 study participants, has found higher vitamin D levels to be associated with reduced all-cause mortality, and those with severe deficiency had almost twice the mortality rate as those with higher levels.

In response to these growing concerns, Public Health England now recommends that everyone should supplement their diet with vitamin D during autumn and winter (October-March). Babies and young children up to the age of five, and those identified to be at higher risk, should take a daily supplement all year round

Vitamin D is best supplemented as D3 (cholecalciferol) since this is the form produced naturally by the body in response to sunlight. Growing evidence suggests that vitamin D works in synergy with vitamin K and it is often recommended that these nutrients are supplemented together.¹⁻⁴

BONE HEALTH – 'incidence of rickets is worryingly on the rise'

Vitamin D plays an important role in keeping calcium levels balanced in the body.

It is well established that vitamin D is essential for healthy bones, and deficiency is the cause of most cases of rickets and osteomalacia (bone softening disease). Severe vitamin D deficiency in infants or children can cause rickets and incidence of this avoidable, and devastating bone-softening childhood disease is worryingly on the rise. Nutritional rickets is a significant risk factor for fractures in children and adolescents, and can also have major implications for healthy development of teeth.

Despite well-established Public Health England supplementation guidelines (400 IU vitamin D daily for infants and young children up to the age of five), many young children are still at risk for nutritional rickets due to low rates of awareness and supplement compliance. Bone health effects of vitamin D deficiency are also observed in adults or elderly subjects.

RESEARCH HIGHLIGHTS

■ Increased fracture risk: In a 2018 review article published in *Endocrine Reviews*, researchers found that vitamin D deficiency accelerates bone turnover and loss and enhances the risk of osteoporotic fractures; severe vitamin D deficiency later in life can cause osteomalacia.¹⁵ Several long-term studies have found increased fracture risk in subjects with the lowest vitamin D levels.¹⁶

■ Bone mineral density: In the National Health and Nutrition Examination Survey (NHANES), researchers found a significant association between bone mineral density and vitamin D levels.¹⁷ Two recent randomised controlled trials have found positive effects of vitamin D supplementation on bone mineral density in study subjects with low vitamin D levels (<30nmol/l).¹⁸⁻¹⁹

Rickets: Low adherence to vitamin D supplementation guidelines in infants and young children (400 IU daily all year round*) have been leading to a resurgence of rickets.²⁰

*Exceptions are babies receiving 500ml or more fortified formula milk daily, or breastfed babies where mum is certain that her breast milk contains optimal daily amounts. Getting enough vitamin D via breast milk is a significant challenge, however, and for most breastfed babies, a daily supplement will be required.

BRAIN HEALTH – 'Optimal levels of serum vitamin D are necessary for neurological development and also to protect the adult brain'

Vitamin D plays a vital role in neuronal and brain development and function in early life and right through into older age.

Way beyond its role in calcium metabolism and bone health, low levels of vitamin D have more recently been linked to cognitive impairment, depression and autism. Vitamin D receptors are widespread in brain tissue, and the biologically active form of vitamin D has shown neuroprotective effects, including the clearance of amyloid plaques, a hallmark of Alzheimer's disease.²¹⁻²³

RESEARCH HIGHLIGHTS

■ Neurological development and protection: A 2017 review published in the *International Journal of Molecular Science* found that optimal levels of serum vitamin D are necessary for neurological development and also to protect the adult brain.²⁴

■ Depression: A 2018 randomised, placebo-controlled clinical trial of vitamin D supplementation in older adults (> 60-yearsold) found that supplementation with the 'sunshine' vitamin can improve depression scores.²⁵ An additional 2018 clinical study found vitamin D supplementation to be beneficial in improving physical and mental health status in psychiatric outpatients.²⁶ A 2017 review published in *Pharmacological Reviews* found vitamin D levels to be linked with both unipolar and bipolar depression.²⁷

■ Cognitive function: A 2017 systematic review and metaanalysis found that low serum vitamin D (< 25 nmol/l) increases dementia risk, especially in adults and patients above 65 years of age.²⁸ An earlier 2015 study found that vitamin D helps to maintain cognitive function in older adults.²⁹ ■ Autism: A 2018 double-blind, randomised, placebo-controlled trial published in *Nutritional Neuroscience* found that children with autism spectrum disorder (ASD) had lower increases in serum vitamin D levels following supplementation. Potential mechanisms involved in this alteration could be altered absorption/metabolism, as well as genetic factors.³⁰ Emerging research also suggests that higher serum vitamin D either during pregnancy, or early in life, may reduce ASD risk.³¹

CARDIOVASCULAR HEALTH – Vitamin D supplementation may

'Vitamin D supplementation may protect against cardiovascular disease through improving risk factors, including high blood pressure, dyslipidemia and inflammation'

Vitamin D is now being recognised as an important risk factor for heart disease, one of the leading causes of death in industrial countries. Observational studies have consistently found an association between low vitamin D and presence of cardiovascular disease risk factors, including blood pressure, dyslipidemia and inflammation.

The presence of vitamin D receptor throughout the cardiovascular system provides additional biological support for these observations. Vitamin D deficiency impairs cardiovascular function and is strongly associated with the heightened risks of various cardiovascular health problems, such as hypertension, metabolic syndrome, heart failure, and stroke. Vitamin D exerts its beneficial cardiovascular effects through many pathways.³²⁻⁴⁰

RESEARCH HIGHLIGHTS

■ Cardiovascular disease: A large scale 2018 systematic review and meta-analysis of randomised controlled trials on vitamin D supplementation, serum vitamin D concentrations and cardiovascular disease risk factors was published in *Frontiers in Cardiovascular Medicine*. Out of a possible 2,341 studies, only 81 met the strict inclusion criteria. The researchers found that, "vitamin D supplementation may protect against cardiovascular disease through improving risk factors, including high blood pressure, elevated parathyroid hormone, dyslipidemia and inflammation".⁴¹

INFLAMMATION – 'Vitamin D deficiency is more common in patients with inflammatory bowel disease

When immune cells are exposed to vitamin D in laboratory experiments, they become less inflamed and a large volume of research has demonstrated anti-inflammatory effects of vitamin D. It is widely thought that vitamin D plays an important role in balancing inflammation by regulating the production of inflammatory cytokines and immune cells.⁴²⁻⁴⁶

RESEARCH HIGHLIGHTS

■ Inflammatory bowel disease (IBD): In a 2018 study, researchers evaluated vitamin D deficiency in 87 patients with IBD. They found that approximately 75 per cent of the IBD patients studied were deficient in vitamin D, and deficiency was also associated with disease activity in patients with Crohn's disease.⁴⁷ In an additional 2018 study, vitamin D deficiency was found to be common in 224 patients with IBD. The researchers also found an association between vitamin D levels and disease activity, as well as inflammatory markers (faecal calprotectin) in Crohn's disease.⁴⁸

■ Pollution-induced inflammation: Vitamin D insufficiency/ deficiency and air pollution are two major environmental factors that appear to influence the onset and stability of asthma, as well as other respiratory diseases. A 2018 study published in *PLoS One* found that vitamin D enhanced antioxidant responses and modulated the immune response to air pollution. The researchers concluded that vitamin D may protect airways from disease-causing, pollution-induced inflammation and commented: "Our study provides evidence to support larger trials of vitamin D supplementation to alleviate the harmful impact of air pollution."⁴⁹

■ High sensitivity C-reactive protein (hs-CRP): High sensitivity C-reactive protein is a marker found in the blood, and levels are known to rise in response to inflammation. A 2014 meta-analysis of 10 randomised controlled trials and involving a total of 924 participants found vitamin D supplementation to be beneficial for the reduction of hs-CRP. The researchers concluded: "Our findings demonstrated the significantly favourable effects of vitamin D supplementation on hs-CRP level."⁵⁰

■ **Type 2 diabetes:** A 2018 systematic review and meta-analysis of 20 randomised controlled trials found evidence that vitamin D supplementation may reduce chronic low grade inflammation in patients with type 2 diabetes.⁵¹

Katherine Pardo BSc (Hons), Dip ION is Head of Nutrition at nutritional supplement company, Nutri Advanced, one of the leading educators in the field of Functional Medicine. She originally trained as a Nutritional Therapist at the Institute for Optimum Nutrition in London and is committed to helping people make realistic and sustainable food and lifestyle choices for improved health and wellbeing.





The experts in nutrition education

With continued growth in the number of students, and with the rollout of new digital learning, the Institute for Optimum Nutrition (ION) has an exciting year ahead, as Rachel Symonds discovers.

here has never been greater interest in the power of nutrition, both among the general public but also among those wanting to make it their career.

This is certainly the experience at the Institute for Optimum Nutrition, one of the UK's leading organisations providing high level training across a range of modalities, which reports rising interest in the education it offers.

The institute has been in existence for more than three decades, and its CEO, Chris Mansi, commented: "ION often attend public and trade shows, where there is a huge amount of interest in nutrition and the desire to find out more. Our reputation and the increase in celebrity diets and celebrity endorsement of diets, as well as people attributing a major change in their health and wellbeing to the work of nutritional therapists such as Amelia Freer (ION graduate), have all helped."

And Dean, Heather Rosa, added: "We are also seeing an increase in the popularity of our short courses, especially around

Institute for Optimum Nutrition



cancer, gut health and hormonal imbalances. The reason for this increase could possibly be the TV shows that have concentrated on the importance of the gut in overall wellbeing. We have a number of short courses that provide the opportunity for people to try out recipes and these are very popular amongst the profession and the public – people are very hungry (sorry for that!) for ideas on how to cook foods they may not be familiar with or just how to use foods to support wellbeing."

THE ION DIFFERENCE

There are many places that people can choose to study for their nutritional therapy qualifications, so what makes ION unique? And what, as a perspective student, could you gain from being part of the organisation?

"What makes ION different is our focus on developing enquiring critical minds – developing in our students' skills to interrogate information and curiosity and reflection so they will go beyond the obvious," Chris explained. And Heather continued: "We specialise in part-time weekend delivery so students can incorporate their studies with their work and family commitments. Our students tell us the virtual learning environment, livestreaming of lectures, academic rigor, lectures and clinical training, the flexibility and student support all make ION the best place for them to study.

"The ability to transfer at points from eLearning and attendance or vice versa is a great bonus for students whose circumstances change. Students can also take time out of study. We have a dedicated academic support tutor, who can support students returning to study or who are studying at higher education level for the first time. Students also really appreciate the staff team who provide consistency and support throughout their studies."

Turning to the impressive skills within the organisation, all the tutors are experienced and qualified in the areas they lecture in and the clinic supervisors are established successful practitioners. Chris added: "ION supports the continual education of its staff and their research. But not only do we depend on our experienced team, we benefit from being able to call on industry experts in special interest areas."

ION also ensures students are fully supported through their studies and beyond. For example, there is a whole structure of support in place for students, starting with the year leader, module leaders, the course leader and the academic support tutor.

"Our virtual learning classroom can be accessed 24/7 and through this, students can speak with each other and their tutors in forums. In addition, webinars are used for group work and assignment support. Constructive feedback is provided promptly on all assignments," Heather explained. "Students can feedback at the end of each module and at each semester through the student-staff liaison committee and annual survey. ION has a reputation for responding quickly to students' needs.

"For our graduates we offer a comprehensive short course/



CPD programme, led by specialists in their field. There is an alumni community, which enables our graduates to stay in touch, find out about what is going on and it also posts job opportunities."

ION DEVELOPMENTS

ION is constantly building on its strengths and expertise to ensure it continues to deliver leading education in a changing market.

Back in 2014, there was a complete change in the leadership of the organisation, with Heather Rosa joining as Dean, having led the nutritional therapy degree programme at Westminster University, and she herself is an ION graduate. Furthermore, Chris Mansi joined as CEO from the charity sector, having worked in the mental health field for over 17 years.

"Since then, there has been an office move and a thorough review of the curriculum. The Nutritional Therapy Diploma eLearning (distance) programme is NTEC accredited, alongside the attendance programme. This year, the Level 6 modules of the diploma have been endorsed by an Ofqual regulated organisation and we have gained British Accreditation Council accreditation for the diploma and science access course," Chris explained.

Today, the most popular courses are the professional practice Nutritional Therapy Diploma.

"As a part-time, three-year course, it is accessible for those wanting to make a career change. A DipION graduate can practice as a BANT Registered Nutritional Therapist, helping clients on a one to one basis in private practice. Graduates can also practice as BANT Registered Nutritionists, which opens up a diversity of career opportunities working in publishing, education and information and advice services for the health industry or corporates," Heather explained.

"We also offer a science access course for those who do not meet the entry requirements for the Nutritional Therapy Diploma Course, which provides a great science foundation for future learning. Our science access modules can also be taken individually or as a whole as a refresher."





EXPANDING DIGITALLY

The way people learn these days has changed dramatically since ION was first created and the organisation knows it has to meet these needs. And that is why it has placed a major focus on its digital offering.

Heather pointed out: "Technology has enhanced the learning environment for all our students, and the delivery of the clinic training modules. Advancements in technology means all our lectures are livestreamed so our eLearners can be in the 'same room' as the attendance students and put their questions to the lecturers in real time.

"Increasingly, now the eLearning course is the course of choice for most of our students. This has been the dramatic change since 2014. Back in 2014, the eLearning course accounted for 40 per cent of our student body, now we are expecting 30 per cent more eLearners than attendance learners."

And in 2019, this will be taken even further.

"In 2019, the rolling out of new digital infrastructures will streamline our back-office services and improve applicant engagement," Heather explained.

Whether it is digital learning or the more traditional way, the courses are always being refined to ensure they stay up to date, and in an easy to access form.

Heather explained: "We always review and refine the courses through annual quality monitoring. Our CPD courses continue to be updated to bring topics that are of the moment. We continually look to work in collaboration with partners so that we can offer the best opportunities for our students and graduates and to facilitate and conduct research."

And Chris finished: "The Nutritional Therapy Diploma course is offered as attendance in September and there are two eLearning options in September and February. We also offer five points of entry to our Nutritional Therapy Science Access Course (attendance and eLearning). We have a range of packages for those returning to practice. We accept Recognised Prior Learning (certificated and experiential). We also have currently around 30 short course/CPD days per year."

New! Vitamin K2 Oral Spray

Putting calcium in balance

- Supports bone health and normal blood clotting
- Delivers an optimal 180µg of vitamin K2
- Absorbs directly into the bloodstream, bypassing the digestive system
- Superior bioavailablity of 99% pure active K2 MK-7



Available online at www.betteryou.com

BetterYou 3

CPD DIRECTORY

If you want to top up your CPD points, take inspiration from these forthcoming events.

BANT Professional Supervision – Scottish Group 2

January 8 – Edinburgh

CPD hours: BANT two hours Speakers: Sarah Stelling Cost: £30 Website: bant.org.uk/members-area/bant-supervision/ meet-the-supervisors/#Sarah_Stelling

BANT Professional Supervision

January 9 – Radyr

CPD hours: BANT two hours Speakers: Beatrice Cutler Cost: £30

BANT Professional Supervision

January 9 – Tunbridge Wells January 14 – online group two January 16 – Lewes January 21 – online group one

CPD hours: BANT two hours Speakers: Carmel Buckley Cost: £30 Website: bant.org.uk/members-area/bant-supervision/ meet-the-supervisors/#Carmel_Buckley

BANT Professional Supervision

January 10 – Birmingham January 24 – Milton Keynes

CPD hours: BANT two hours Speakers: Felicia Jones Cost: £30 Website: bant.org.uk/members-area/bant-supervision/ meet-the-supervisors/#Felicia_Jones

BANT Local Networking Meeting

Working in Europe

CPD hours: BANT two hours Speakers: Nitsa Kilari Website: bant.org.uk/members-area/bant-localnetworks/local-network-coordinators-list-2/#Jessica_ Fonteneau

BANT Professional Supervision

January 16 (AM and PM) – Manchester

CPD hours: BANT two hours Speakers: Dalbinder Bains Cost: £30 Website: bant.org.uk/members-area/bant-supervision/ meet-the-supervisors/#Dalbinder_Bains

FORTHCOMING WEBINARS

Target Publishing, which publishes *Nutrition I-Mag*, hosts a series of free webinars for practitioners. Register at www.ihcanconferences. co.uk/webinar

Protein-rich diets, pH and pain signalling



Tuesday, January 15, 6.30pm-7.30pm (live from Germany) Presented by Tanja Werner, Dr. rer. nat. (Doctor of Natural Sciences)

It is now becoming clear that pH management plays an underlying role in many common complaints. Recent research demonstrates that pH imbalances will intensify pain syndromes, lead to poor bone health, and even increase cortisol secretion. With soaring rates of obesity and diabetes, it is clear our modern Western diet has failed us, with so many looking at alternatives. However, the current diets purported to be healthy, such as high protein/low carb and 'Paleo' style, may be contributing to acid-alkaline imbalances, with far reaching health implications.

In this webinar, you will:

Discover emerging research on the role of acid-alkaline dysregulation as a driver of pain and inflammation.

Understand why acid-base balance is vital for musculoskeletal health and pain management.

■ Learn the latest research on the connection between dietary acid load and the increased risk for osteoporosis and diabetes.

Review the evidence behind high protein/low carb diets in the context of our true 'paleo' ancestors.

Gain strategies to assist in reducing pain and inflammation through pH regulation and mineral therapy.

STEPS TO VEGAN COOKING

 $\langle \rangle$

Whether you're a committed vegan or want to try your hand at plant-based cooking, discover these simple and healthy dishes from the new book, *First Time Vegan*.



Chai and turmeric porridge (Serves 2)



I'm always trying to sneak turmeric into as many dishes as I can. This root has some serious nutritional cred, with a slew of studies backing its anti-inflammatory properties. And with its vibrant yellow-gold hue, I can't help but be drawn to it. Using it alongside chai spices in my morning oats is an easy way to fit it into my day. This porridge is made with a combination of rolled/old-fashioned oats and buckwheat groats but if you can't find buckwheat, you can use all rolled oats instead.

INGREDIENTS:

₩

- 45g/½ cup rolled/old-fashioned oats
- 80g/½ cup buckwheat groats (untoasted)
- ½ tsp ground cinnamon
- ½ tsp ground turmeric
- ½ tsp ground ginger
- ¼ tsp ground cardamom
- ¼ tsp ground nutmeg
- ¹/₈ teaspoon ground cloves
- Salt, to taste

METHOD:

- 475ml/2 cups boiling water
- 235ml/1 cup almond or coconut milk, plus extra to serve if needed
- 1/2 tsp vanilla extract
- 1 banana, sliced

TO SERVE:

- Toasted flaked/slivered almonds
- Chopped figs, berries or extra
- Banana

1 Combine the oats and buckwheat in a medium saucepan with a lid. Add all the spices, season with salt to taste and stir until everything is well mixed together.

2 Pour in the boiling water, almond or coconut milk and vanilla, then bring to the boil.

3 Reduce to a simmer and cook with the lid on for about 10 minutes, stirring occasionally until the oats are soft and most of the liquid has been absorbed.*

4 Stir in the banana slices and cook for an additional 10 minutes, until they're softened and smell sweet. Serve with additional almond milk and a topping of toasted flaked/slivered almonds and fresh fruit.

4 Alternatively, to save time in the morning you can prepare the oats the night before; simmer for five minutes, then remove from the heat and cover with a lid. Let the oats soak overnight at room temperature or in the fridge. In the morning, add a sliced banana to the oats. Bring back up to a bubble, adding a little more water or almond milk to loosen. Once heated through and creamy and the bananas are fragrant, you're ready to go.





Ginger coconut broth with veggies and noodles (Serves 2-3)

This falls somewhere between a soup, a curry and a brothy ramen bowl. With ginger, chilli and garlic flavours it often hits the spot when I'm looking for something that I can slurp a big bowl of without it weighing me down.

FOR THE BROTH:

₩ ₩

- 2tsp avocado oil
- 4 garlic cloves, finely chopped or grated
- 2tbsp grated fresh ginger
- 1 x 400g/14oz can coconut milk (I use full fat)
- 2tbsp tamari
- 120ml/1/2 cup water or vegetable stock/broth
- 1/4 tsp chilli flakes/hot red pepper flakes (optional)

METHOD:

ADD-INS:

- 120-170g/4-6oz soba noodles
- 1 courgette/zucchini, peeled or spiralized into noodles or cut into julienne
- 1 carrot, spiralized into noodles or cut into julienne

www.nutritionimag.com

• 130g/1 cup shelled frozen edamame beans. thawed

1 Cook the soba noodles in boiling water according to the package instructions (the 100 per cent buckwheat soba noodles I use usually take about eight minutes).

2 While the soba noodles are cooking, heat the avocado oil in a large saucepan or high-sided frying pan/skillet over a medium-high heat. Add the garlic and ginger and let them sizzle for about 30-60 seconds until fragrant, but not browning.

3 Add the coconut milk and tamari and stir. Add the water or vegetable stock/broth and chilli flakes/hot red pepper flakes (if using).

4 Bring to a simmer, then stir in the courgette/zucchini, carrot and edamame beans and let everything warm through for about two minutes. Remove from heat.

5 Divide the cooked soba noodles between bowls and pour the hot broth and veggies over to serve.





Chocolate banana bread (Makes one loaf)

Until I met my husband, banana-flavoured anything just wasn't my thing. Somehow his love of a bananachocolate pairing rubbed off on me, and I find myself in the mood for this banana bread all the time. I like to serve it like cake – warm and à la mode, but you can definitely eat this for breakfast too – it's free of refined sugar and high in fibre – and a little scattering of chocolate never ruined anyone's morning!

INGREDIENTS:

- 130g/1 cup wholewheat flour
- 100g/1 cup almond flour
- 50g/½ tsp oat flour

₩ ₩

- (or 70g/generous 1/2 cup oats, finely ground)
- 3tsp baking powder
- 1tsp ground cinnamon
- 1/2 tsp ground nutmeg
- 1⁄2 tsp salt
- 3 large bananas (overripe is best)
- 90ml/ ¹/₃ cup melted coconut oil, plus extra for greasing

METHOD:

- 1 Preheat the oven to 180°C (350°F) Gas 4.
- 2 Mix together the dry ingredients (flours, baking powder, spices and salt) in a medium bowl.
- 3 Mash the bananas in another bowl, then add the melted coconut oil, almond milk, vanilla and maple syrup and mix everything together using a rubber spatula.
- 4 Gradually mix the dry ingredients into the banana mixture until everything is well combined. Fold in the chocolate chips.

5 Pour the batter into the prepared loaf pan and sprinkle the top with the pecans or walnuts. Bake the loaf in the preheated oven for 45-50 minutes, rotating halfway through the cooking time.

6 Remove from the oven and leave to cool to room temperature in the pan before turning out. Serve toasted with nut butter for breakfast, or warm with vegan ice cream for dessert.





Recipes taken from First-time Vegan, by Lea Vanderveldt, published by Ryland Peters & Small.

60ml/¼ cup almond milk

- 1tsp vanilla extract
- 60ml/¼ cup pure maple syrup
- 80g/½ cup dark/bittersweet vegan chocolate
- chips or roughly chopped chocolate
- 30g/¼ cup pecans or walnuts
- Nut butter or vegan ice cream, to serve (optional)
- 12 x 23cm/9 x 5in loaf pan, greased with coconut oil

I-Mag giveaways

We showcase a selection of giveaways on offer to readers this issue.



NUTRIGOLD ORGANIC ASHWAGANDHA

Nutrigold Organic Ashwagandha (*Withnia somnifera*) is a well-known adaptogenic herb and popular in Ayurvedic practice. This Organic Ashwagandha contains a potency of 500mg KSM-66 Ashwagandha powder per capsule with no other added excipients. The KSM-66 strain is the highest-concentration extract in the market today, derived only from the roots of the ashwagandha plant, and leads the industry in clinical trials and research.

\circlearrowright I:Win: We have 10 pots to give away.





FREEDOM, CLEANSE, RESTORE

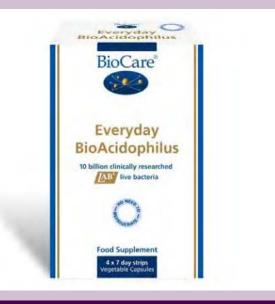
Freedom, Cleanse, Restore is an exceptional broad-spectrum botanical remedy created by Dr Amin (PHD Parasitologist), which restores optimal digestive health. It is an effective and trusted practitioner product, which addresses intestinal and tissue invading protozoans and helminth parasites, as well as pathogenic bacteria, fungi and yeast. The ingredients are synergistically combined with compatible energies so there are fewer herxiemer reactions. It acts by killing parasites and pathogens, cleaning organ systems and restoring damaged tissues to a healthy state.

 $\mathring{\mathbb{O}}$ I:Win: We have one set of Freedom, Cleanse, Restore to give away.

BIOCARE EVERYDAY BIOACIDOPHILUS

BioCare Everyday BioAcidophilus, from the awardwinning range, is a high potency blend of the unique LAB4complex of live bacteria in convenient capsule form. Providing 10bn viable bacteria per capsule, it's ideal for everyday use with no need for refrigeration. The handy seven-day strips can be popped in your bag or kept on your desk.

 $^{\circlearrowright}$ I:Win: We have 10 to give away.



The new range from epigenar®

epigenar[®] is a range of nutritional supplements which provide novel formulations to support multiple body systems.

They have been developed to work alongside the Nutramedix range of products in supporting the body's immune system.

Other NEW products in range include: Chinese Skullcap, Kalmegh (Andrographis), Gotu Kola (Centella asiatica), Red Yeast Rice and D-Ribose







Practitioner Registration Available info@riohealth.co.uk or call 01273 570987 for more information