# HEALTH AND WELLBEING NEWSLETTER



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#### **Top Health News**

#### UKHSA warns of back to school measles surge

The UK Health Security Agency (UKHSA) is today issuing an urgent call to parents to ensure their children catch up on missed vaccinations before they head to the classroom, as UKHSA scales up the Childhood Immunisation Marketing Campaign across England amid fears of a further surge in measles cases as the new term begins.

The campaign, delivered by UKHSA in partnership with the Department for Health and Social Care (DHSC) and NHS England, will remind parents and carers of the risk of their children missing out on protection against serious diseases, including measles, whooping cough, meningitis, diphtheria

and polio.

Since Autumn 23 there have been a number of major measles outbreaks in the West Midlands, North West and London with sporadic cases across the country – resulting in the highest number of cases in England since 2012.

This prompted the launch of wide ranging MMR catch-up activities targeting communities with low uptake led by NHS and other partners between August 23 and April 24, for children who missed measles, mumps and rubella (MMR) vaccines.

An MMR Evaluation Report published today by UKHSA assesses the impact of the catch up activity. This shows that

parents are coming forward and there has been a significant increase in MMR uptake, particularly among deprived and ethnic communities...

Measles spreads very easily among those who are unvaccinated, especially in nurseries and schools. It can be a very nasty illness and in some children can be very serious, leading to hospitalisation and life-long complications and tragically even death in rare cases. Getting vaccinated not only gives children protection but it also helps to prevent the spread of the protect those and disease vulnerable.

**UK Health Security Agency** 

#### Type 2 diabetes drug associated with 35% lower risk of dementia, study finds

A drug used to treat type 2 diabetes is associated with a 35% lower risk of dementia, according to research.

The number of people with dementia globally is expected to nearly triple to 153 million by 2050. The health and social costs linked to dementia already exceed \$1tn (£780bn) a year, research shows.

Type 2 diabetes is one of 14 risk factors associated with a greater risk of developing dementia. Other factors are high levels of bad cholesterol, untreated vision loss, hearing impairment, high blood pressure, smoking, obesity and physical inactivity.

Now a large Korean study published in the BMJ has suggested that a medicine used to treat type 2 diabetes, called sodium-glucose cotransporter-2 (SGLT-2) inhibitors, may lower the risk of dementia.

While previous studies have suggested SGLT-2 inhibitors could have a protective effect against dementia for older patients, until now, any protective effect on younger people and specific types of dementia such as Alzheimer's disease and vascular dementia has been unclear.

The academics analysed data from more than 220,000 type 2 diabetics aged between 40 and 69 on the Korea national health insurance service who did not already have dementia.

Half were taking SGLT-2 inhibitors,

which reduce the amount of glucose the kidneys reabsorb, and half were taking another drug called dipeptidyl peptidase 4 (DPP-4) inhibitors, which block the enzyme that helps increase insulin levels after food.

A total of 1,172 participants newly diagnosed with dementia were identified during the study period.

The researchers calculated SGLT-2 inhibitors were associated with a 35% lower risk of dementia compared with DPP-4 inhibitors. They also identified a 39% reduced risk for Alzheimer's disease and a 52% reduced risk for vascular dementia associated with patients taking SGLT-2 inhibitors.

Anna Bawden, The Guardian

# OCCUPATIONAL HEALTH NEVSLETTER



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#### Innovations in cancer treatment through targeted bacterial vaccines

The human body hosts more than 1014 bacteria, which play crucial roles in human health.

F. nucleatum, an oral anaerobe, is frequently associated with colorectal cancer and is linked to increased cancer cell proliferation, metastasis, and poor treatment outcomes.

Recent studies have shown that F. nucleatum can trigger autophagy in cancer cells, leading to increased resistance to various chemotherapy drugs.

Additionally, F. nucleatum promotes an immunosuppressive tumour microenvironment, hindering the infiltration of tumour-killing natural killer cells and T cells.

Therefore, eliminating F. nucleatum within tumours could be a strategic approach to enhance therapeutic

# Robotic surgery improves gynaecological treatments

State-of-the-art robotic surgery has helped improve treatment for gynaecological conditions, an NHS trust has said.

The Da Vinci Xi robot is being used at Alexandra Hospital, Redditch, to perform surgeries with greater precision, reduced post-operative pain and a lower risk of complications from blood loss.

More than 100 women with conditions such as endometriosis have undergone surgery using the robot, Worcestershire Acute Hospitals NHS Trust said.

It has provided surgeons with

outcomes for colorectal cancer.

Antibiotics are widely used to combat bacterial infections.

However, they often indiscriminately kill both beneficial and harmful bacteria, potentially disrupting the intestinal microbiome.

Bacterial vaccines offer a promising solution by targeting specific pathogens without harming the broader microbiome.

However, developing effective bacterial vaccines is challenging due to the weak immunogenicity of major bacterial antigens.

Although adjuvants can enhance the humoral response, effective vaccines

require robust activation of antigen specific cellular response to eliminate intracellular pathogens.

Hence, there is a strong desire for an antibacterial vaccine capable of eliciting robust immune responses to selectively eradicate F. nucleatum while preserving other microbiota.

To address these challenges, in a recent research article published in Science Bulletin, a research team led by Professor Qian Chen from Soochow University (Institute of Functional Nano & Soft Materials, FUNSOM) proposed a novel bacterial vaccine (LipoFM-CPG) by inserting cholesterol-modified agonist CpG into F.nucleatum derived membranes.

# Recipe of the Month - Broccoli fusilli with kale and walnut pesto

#### . Recipe

50g walnuts (about 2 handfuls)

½ regular sized garlic clove, peeled and roughly sliced

1 handful of kale, heavier stems removed and discarded

20-30g fresh basil

3 tbs Pomora extra virgin olive oil

150g wholemeal brown fusilli

1 head of broccoli

To see the method for this recipe, and for more recipes from Corrie, sign into www.heales.com and click on Healthy Eating Blog.

instruments that offer a greater range of movement than in conventional keyhole surgery. It was first used at the hospital in 2022 for prostate cancer surgery but is now also offered to patients for various conditions.

Patients who have undergone robotic surgery for hysterectomy or removal of endometriosis have gone home the same day as their surgery, the trust said.

Endometriosis specialist Donna Ghosh said it was a huge achievement to perform more than 100 gynaecological robotic surgery cases.

"We anticipate further expanding our offering towards joint surgery across different clinical specialities in future," she added.

Alice Cullinane, BBC News

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# CCUPATIONAL HEALTH NEWSLETTER



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#### Scientists to use AI to analyse 1.6m brain scans to develop tool predicting dementia risk

Scientists are to analyse more than a million brain scans using artificial intelligence with the aim of developing a tool to predict a person's risk of dementia.

Researchers the University of at Edinburgh and the University of Dundee will examine CT and MRI scans of patients from Scotland captured over more than a decade, as part of a global research effort called NEURii.

The team will use AI and machine learning to match the image data with linked health records to find patterns that could help doctors better determine a person's risk of developing dementia.

UPPER BODY

og and

dementia globally is forecast to nearly triple to 153 million by 2050, and researchers warn this presents a rapidly growing threat to health and social care systems. Health and social costs linked to dementia already exceed \$1tn (£780bn) a year, research shows.

The number of people living with

The scientists aim to create digital tools that radiologists can use when scanning patients to determine their risk of dementia and diagnose the disease and related conditions earlier.

The tools could also help speed up the development of more precise treatments for dementia, they said.

Andrew Gregory, The Guardian

#### Workout of the month - Upper Body Stretch

#### **Exercises**

- 1. Back stretch
- 2. Ab stretch
- 3. Chest stretch
- 4. Upper back stretch (arm across)
- 5. Upper back stretch (prayer)

Perform each of these exercises for about 30 seconds, breathing throughout.

the workout on our homepage.

# If you want to see Carys performing the workout, and for details on how to do the exercises, log on to the Heals Medical Health and Wellbeing portal and check out

### Finger-prick test could diagnose early Alzheimer's with 'needle in a hay stack' precision

GPs could soon be able to screen patients for Alzheimer's disease using a finger-prick test.

The test, which is the size of a credit card, uses "needle in a haystack" precision to detect protein biomarkers of the condition before symptoms progress.

It detects the disease using sensor technology which can detect ultra low concentrations of disease markers in blood in minutes.

device was developed bν researchers at Monash University in Melbourne.

There is no single test for Alzheimer's in the UK and a diagnosis is currently

based on а combination assessments. **Patients** are examined by their GP and a neurologist before undergoing a brain scan.

However, the latest figures show that just 2 per cent of people are able to access tests such as PET scans or lumbar punctures, which are only available in around one in 20 memory clinics.

Sudha Mokkapati, associate professor at the university's Materials Science and the Engineering department, said process could remove the need for laboratory-based pathology tests and speed up diagnosis.

"It's simple to use, low-cost and portable

so it could be made widely accessible to GPs to screen patients right at the pointof-care. Detecting very early disease in large populations could dramatically change the trajectory of this burdening disease for many patients, and shave millions off associated health care costs," she said.

"We've completed testing that shows the technology is highly advanced by design and capable of detecting ultra low levels of several disease biomarkers in blood. The next stage is to undertake the clinical validation needed to bring this a step closer to reality, and we're reliant on further funding to progress this."

Daniel Keane, The Standard

# OCCUPATIONAL HEALTH NEVSLETTER



#### **Health Promotion and Education**

Heales Medical can help advise and manage proactive health promotion days that will encourage employees to adopt healthier lifestyles.

Our health promotion days specialise in the prevention of ill health and the promotion of health & well-being within your organisation.

Our services are delivered by high calibre, well qualified staff with a broad experience base and all results are assessed against National Clinical Guidelines.

During each assessment, the health professional will ask lifestyle questions about the employee's general health and give health advice.

After each assessment we will be able to provide results, advice and an information pack.

If you have any queries or are interested in having an event, please contact a Heales Occupational Health Advisor or Contract Manager for further information.



- ✓ Advice of physical activity
- ✓ Advice on healthy eating
- ✓ Advice on weight management
- ✓ Advice on stress management
- ✓ Advice on smoking, alcohol & drugs
- ✓ Understanding blood pressure
- ✓ Understanding blood cholesterol

#### Health and Wellbeing Portal

For more resources see our Health and Wellbeing Portal!

Our portal has a wide range of information, tips and advice to help you support your health and wellbeing, including:

- Health Promotion Blog
- COVID-19 advice
- Health & healthy eating tips
- Health Newsletter archive
- · Healthy lifestyle & exercise blog
- Vegetarian blog
- Accessible apps
- Specific information and tip pages for injury, illness and disability in daily life and in the workplace
- Occupational Health information

Pages and information will be updated and added to continually, if you have any suggestions, let us know at carys.swanton@heales.com.

# Health Promotion Calendar

Click on the event to go to their website.

#### **SEPTEMBER**

Blood Cancer Awareness Month

01/09/24-30/09/24

Urology Awareness Month 01/09/24-30/09/24

Know your numbers! Week 02/09/24-08/09/24

World Suicide Prevention
Day
10/09/24

World Sepsis Day 13/09/24

World Alzheimer's Day 21/09/24

International Week of the Deaf 23/0924-29/09/24

National Eye Health Week 23/0924-29/09/24

Migraine Awareness Week 23/0924-29/09/24

Macmillan Coffee Morning 27/09/2024

National Fitness Day 28/09/2024

#### **OCTOBER**

Stoptober 01/10/24-31/10/24

Breast Cancer Awareness Month 01/10/24-31/10/24

