

# Surrey Uni Zebrafish Study Links Blood Pressure Drug to Potential ADHD Treatment

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A commonly prescribed blood pressure medication could offer a safer alternative for treating ADHD symptoms, according to a new study involving the University of Surrey. The findings suggest that amlodipine, a well-established drug for managing hypertension, may help reduce hyperactivity and impulsivity, key characteristics of attention-deficit/hyperactivity disorder (ADHD).

## From Fish to Humans: Genetic Links in ADHD Research

The study, published in *Neuropsychopharmacology*, tested five potential drugs in rats genetically bred to exhibit ADHD-like symptoms. Of these, only amlodipine significantly reduced hyperactivity. To validate the findings, researchers turned to zebrafish (*Danio rerio*), an important model organism in neurological studies, which shares approximately **70% of its genes** with humans. The zebrafish trials confirmed that amlodipine reduces hyperactivity and impulsivity, and for the first time, researchers confirmed that the drug crosses the blood-brain barrier, directly influencing brain function.

Further analysis of human genetic data reinforced the findings, showing that ADHD is linked to calcium channels in the brain—the same targets of amlodipine. A review of UK-wide patient records further strengthened the case, revealing that individuals taking amlodipine reported fewer mood swings and a lower tendency for risk-taking behaviour.

Dr Matthew Parker, co-author of the study from the University of Surrey, noted:

*“Repurposing amlodipine, a well-established blood pressure medication, offers a promising and swift pathway to address ADHD symptoms. Our research indicates that, due to its existing approval and safety profile, amlodipine could be rapidly redeployed as a treatment option for ADHD, potentially providing relief to patients sooner than developing new medications.”*

## Why Zebrafish? The Genetic Overlap with Humans

Zebrafish have become an invaluable model in medical research due to their high genetic similarity with humans. In fact, they share a greater proportion of their genes with humans than many might expect. Some examples include:

- **Chimpanzees** (~98-99%) – our closest genetic relatives.
- **Mice** (~85%) – widely used in biomedical research.
- **Dogs** (~84%) – studied for genetic diseases and neurological conditions.
- **Zebrafish** (~70%) – a crucial model for studying brain function and drug effects.
- **Fruit flies** (~60%) – key for understanding genetics and neurobiology.

Because of this genetic overlap, zebrafish are often used in drug discovery, particularly for neurological disorders. Their transparent embryos and rapid development allow scientists to study the effects of medications in real-time.

## A Safer Alternative to Existing ADHD Medications?

Current ADHD treatments, such as stimulant medications, are effective but often come with significant side effects, including appetite loss, high blood pressure, headaches, and sleep disturbances. Additionally, stimulant medications carry a risk of misuse. Amlodipine, already widely prescribed and well-tolerated, could offer a new alternative with a safer profile.

With approximately **25% of ADHD patients not responding well to existing treatments**, the need for new options is urgent. If further clinical trials confirm these findings, amlodipine could be repurposed as an ADHD treatment much faster than developing a brand-new drug, providing relief for patients sooner.

The study highlights the importance of genetic research in understanding brain disorders and demonstrates how unlikely connections—such as a heart medication treating a neurodevelopmental condition—can lead to breakthroughs in medical science.

# Epsom and St Helier NHS Trust Calls Out Delays to New Hospital Programme

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The long-awaited specialist emergency care hospital for southwest London and Surrey has faced yet another setback following the Government’s announcement about delays to the national New Hospital Programme. Epsom and St Helier University Hospitals NHS Trust has voiced strong concerns over the consequences of these delays, which they warn could have dire implications for patient care and infrastructure safety.

Health Secretary **Wes Streeting** outlined the revised timeline, stating that the New Hospital Programme, initially set for completion by 2030, will now proceed in four phases. Notably, nine schemes under the programme will not commence construction until between 2035 and 2039. Streeting emphasized the need for a “firm footing with sustainable funding” to ensure all projects are delivered.

## A Legacy of Promises and Delays

The proposed hospital in Sutton, intended to centralize critical emergency services for Epsom, St Helier, and the surrounding areas, was approved in 2020 as part of the Government’s pledge to deliver 40 new hospitals by 2030. Initially, the Sutton facility was set to open by 2025. However, delays have since pushed this date to 2027 “at the earliest,” with recent announcements suggesting construction may not begin until much later in the decade.

This latest postponement has sparked frustration within the Trust. **Dr James Marsh**, Group Deputy Chief Executive of the St George’s, Epsom and St Helier University Hospitals and Health Group, did not hold back in his criticism:

*“After decades of false promises, the people of southwest London and Surrey have been let down once again. Every year we delay adds up to £150m to the cost of a new hospital and keeping the current buildings safe to provide care.”*

## Critical State of Current Facilities

The Trust has long highlighted the challenges posed by the aging infrastructure at Epsom and St Helier hospitals. Dr Marsh provided a stark assessment of the situation:

*“We have already had to condemn and demolish one of our wards. It’s only a matter of time before other parts of our hospital become unsafe for treating patients. We now need to plan and prepare for the catastrophic failure of our buildings, which could mean moving patient care into temporary buildings.”*

Dr Marsh extended an invitation to Health Secretary Wes Streeting to visit the hospitals and witness the deteriorating state of the facilities firsthand:

*“If the health secretary thinks we can continue to care for patients for 10 years in this building, we invite Wes Streeting to come and see the state of the estate himself.”*

## Financial Burden of Delays

The financial impact of the delays has been severe. According to the Trust, inflation and the cost of maintaining outdated buildings have driven up expenses by £150 million annually. These costs are expected to rise further as the timeline for the new hospital stretches into the 2030s.

The Trust’s frustration echoes broader concerns from healthcare leaders across the country. NHS Providers interim Chief Executive Saffron Cordery described the delays as “a bitter pill to swallow,” while Matthew Taylor, Chief Executive of the NHS Confederation, warned that prolonged delays would result in higher costs and increased pressure on services.

## The Plan for the New Hospital

Despite these setbacks, the Trust remains committed to its “Building Your Future Hospitals” programme. The plan aims to consolidate six major acute services—including A&E, maternity, and paediatrics—into the new Sutton facility, while upgrading Epsom and St Helier hospitals to provide enhanced outpatient, diagnostic, and rehabilitation services. Both existing hospitals will retain 24/7 urgent treatment centres to support local needs.

## Call for Action

The delays to the New Hospital Programme have fuelled local frustration, with many questioning the Government’s commitment to fulfilling its promises. As Dr Marsh emphasized, the cost of inaction is not just financial but could also jeopardize the safety and quality of care for thousands of patients.

For further details on the Trust’s plans and timelines, visit Building Your Future Hospitals. Images of the facilities, illustrating their current state, are available alongside video footage upon request.

Related reports:

[Prime Minister and Health Secretary Visit Epsom Hospital to Unveil NHS Recovery Blueprint](#)

[Has Epsom’s new MP missed the bus to a new hospital?](#)

[Epsom and St Helier Hospitals in Desperate Need of Repairs](#)

[Public meeting about Epsom Hospital future](#)

[Epsom Hospital upgrade at risk?](#)

[Image: St Helier Hospital](#)

# Tackling health inequalities in Surrey

20 February 2025



Surrey County Council has been awarded 5 years of funding by the National Institute for Health and Care Research (NIHR) to create a **Health Determinants Research Collaboration** (HDRC). The £5m funding will help the local authority to build capacity to do research on prevention and create a culture of using evidence in making decisions.

NIHR HDRC Surrey’s vision is to improve health of our residents and reduce health inequalities which are driven by the social determinants of health. To achieve this, the HDRC Surrey will use the funding to enhance local research capacity, drive research on prevention and public health where evidence isn’t yet available. It will also embed a culture of evidence-informed decision-making which is based on local knowledge underpinned by community involvement and issues that matter most to our residents.

HDRC Surrey is a partnership between the council, the University of Surrey, and voluntary and community partners. Together, over the next five years, we will focus on:

- Improving our research governance and infrastructure
- Building research capacity and providing training support
- Supporting knowledge mobilisation
- Conducting robust research that reflects the needs and experiences of local communities
- Embedding meaningful public involvement at the heart of Surrey HDRC’s work

**Tim Oliver, Leader of Surrey County Council, said:** *“This ambitious project will facilitate a rigorous focus on health inequalities in Surrey. The substantial funding will ensure sustainability in our approach. We already work closely with the University of Surrey and this research programme will build on our existing relationship to provide people locally with better opportunities and outcomes.”*

**Councillor Mark Nuti, Cabinet Member for Health & Wellbeing, and Public Health, said:** *“Improving the wellbeing of residents across Surrey is something that we all strive to achieve. Prevention is the key to a better and healthier place to live and to achieve this we need to know where and how best to invest money and resources. This new funding will enable a fantastic partnership between the council, the University of Surrey and voluntary and community sector to strengthen our research infrastructure. The new research infrastructure will be invaluable in guiding and informing decision-making that will have a real, positive impact on our residents’ lives leaving no one left behind.”*

**Professor Lisa Collins Pro Vice Chancellor, Research and Innovation at University of Surrey, said:** *“The University of Surrey is thrilled to partner with the local authority and involve the community on this vital health research collaboration. The funding will empower us to conduct impactful research that addresses the unique health challenges faced by residents.”*

**Ruth Hutchinson, Surrey County Council’s Director of Public Health, said:** *“The NIHR grant is exciting as it will enable us to work more collaboratively with the University of Surrey, Districts and Boroughs and local communities to directly meet people’s health needs in Surrey, leading to better outcomes.”*

#### Why Surrey?

Although Surrey is seen to be one of the most affluent parts of the UK, there are areas with high levels of deprivation associated with poor health. In 2020, someone living in the most deprived area of Surrey is likely to live 10 years less than someone living in the most affluent part of the county. To address this, we need to better understand how factors like the built environment, housing and the economy affect people’s health in Surrey. Our Health Determinants Research Collaboration (HDRC) will help us to do this.

HDRC Surrey will improve how, as a local authority, we use research to get a better understanding of what works and for whom to reduce health inequalities.

Image courtesy: RDNE Stock project

## Surrey University leading on alternative ADHD treatment

20 February 2025



A multisite clinical trial has launched in the United States to investigate whether non-pharmaceutical methods can be used to treat attention deficit hyperactivity disorder (ADHD) in children ages 7-12. This trial is currently recruiting new patients and seeking FDA clearance.

The trial uses a wearable device – Novostim 2 – developed by Innosphere Engineering Ltd. The company anticipates FDA clearance by Q3 of 2025 and has already received approval for sales in Israel.

The novel treatment builds upon years of research into non-invasive brain stimulation techniques led by the University of Surrey’s Professor Roi Cohen Kadosh. The research team carried out multiple studies in which children with ADHD were treated with transcranial Random Noise Stimulation (tRNS) coupled with cognitive training (CT).

tRNS is a non-invasive technique that delivers a weak and painless electrical signal to the brain to enhance activity in regions associated with attention. In the studies, children who received tRNS and CT experienced significant improvements in their ADHD symptoms, working memory, and processing speed, along with changes in their brain activity, which could be linked to the improvement of their symptoms in the long-term.

Two clinical trials have been completed using Novostim 2 at Hadassah Medical Center in children aged 7-12, which showed significant improvement in ADHD symptoms, including a 43% reduction in ADHD symptom severity and overall symptom alleviation.

The trial, over a two-week period, involves 20-minute treatment sessions in which Novostim 2 is used to deliver tRNS over specific regions in the brain associated with ADHD and during which participants engage in attention-based digital games.

For more information on the latest trial, visit [ADHDtrial.com](https://ADHDtrial.com)

Professor Roi Cohen Kadosh, Head of the School of Psychology at the University of Surrey, said:

*“We were thrilled by the success of the previous clinical trials, which brought us one step closer to providing a safe and effective non-pharmaceutical option for children with ADHD. The device’s ability to modulate brain activity and enhance cognitive functions may hold the key to long-lasting benefits, potentially reshaping the landscape of ADHD treatment. By harnessing the power of psychology, neuroscience, and technology, we can empower young patients to improve their focus, attention and overall wellbeing. The need continues to grow, and I hope to see this technology become available to many children and their families soon.”*

Rami Shacour, co-Founder and CEO of Innosphere, adds:

*“For decades, stimulant medications have been the cornerstone of ADHD treatment. At Innosphere, we’re parents first, driven by a mission to give families more personalized, effective options for their children. With Novostim 2, we’re redefining what’s possible in ADHD care. We’re thrilled to announce sales approval in Israel and eagerly anticipate FDA clearance this year. This is just the beginning, as we explore Novostim 2’s potential to complement existing therapies and transform lives.”*

Image: Professor **Roi Cohen Kadosh**

## New SWLP Laboratory Enhances Diagnostic Services for Epsom Hospital and Beyond

20 February 2025





South West London Pathology (SWLP) has launched one of the most advanced diagnostic facilities in the UK, with new cutting-edge laboratories set to transform healthcare delivery for patients across its network, including **Epsom Hospital**. The upgraded laboratory at Croydon Hospital marks the first phase of a significant technological overhaul aimed at improving diagnostic speed and accuracy.

Serving over 3.5 million people through five hospital sites, including **Epsom Hospital**, and 450 GP practices, SWLP is integral to the region's healthcare infrastructure. When fully operational, the SWLP network of laboratories will process over 30,000 tests daily, ensuring faster turnaround times and better outcomes for patients in Epsom and the surrounding areas.

The state-of-the-art facility will streamline clinical blood science services, including clinical chemistry, haematology, coagulation, and serology, using cutting-edge pre-analytical automation technology developed in partnership with Beckman Coulter, a global leader in diagnostics.

Simon Brewer, Managing Director of SWLP, said:

*"The introduction of Beckman Coulter's advanced analysers at Croydon Hospital marks a transformative step for our diagnostic services. With these technologies soon to be implemented across the entire network, including Epsom Hospital, we are setting new standards in diagnostic efficiency and patient care."*

Rob Young, UK General Manager at Beckman Coulter, added:

*"By equipping SWLP laboratories with the latest diagnostic technologies, we're enabling healthcare teams to deliver faster, higher-quality results. This advancement will significantly enhance the care provided to patients across the SWLP network, including those relying on Epsom Hospital for vital healthcare services."*

The upgraded laboratories will unify diagnostic services across all SWLP sites, enhancing efficiency and ensuring a consistent standard of care. For patients at **Epsom Hospital**, this means improved access to accurate and timely test results, contributing to better overall health outcomes in the local community.

## About South West London Pathology (SWLP)

South West London Pathology (SWLP) is an NHS pathology partnership providing integrated diagnostic services to hospitals, GPs, and healthcare organizations across South West London and beyond. Serving over 3.5 million people, including those at Epsom Hospital, SWLP delivers a comprehensive range of tests using state-of-the-art technology to improve patient care.

Image: Rob Young, UK General Manager for Beckman Coulter Diagnostics;

Matthew Kershaw, Chief Executive of Croydon Health Services NHS Trust;

Simon Brewer, SWLP Managing Director

## Hip pain explained

20 February 2025



Hip pain is a common complaint, particularly among middle-aged and older adults. Two frequent causes are Hip Osteoarthritis (OA) and Greater Trochanteric Pain Syndrome (GTPS). While these conditions share some symptoms, they differ in causes, treatment, and long-term outcomes. Understanding these distinctions is key for accurate diagnosis and management.

### What is Hip Osteoarthritis?

Hip osteoarthritis is a degenerative joint disease characterized by age-related changes in the cartilage of the hip joint. The hip's ball-and-socket structure relies on cartilage for smooth movement, but this can wear down over time, leading to pain, stiffness, and decreased function.

#### Signs and Symptoms of Hip OA:

- **Pain in the Groin or Thigh:** Pain is typically deep in the groin, buttock, or thigh, worsening with activity and improving with rest.
- **Stiffness:** Morning stiffness lasting less than 30 minutes is common, especially after inactivity.
- **Reduced Range of Motion:** Difficulty with daily activities such as putting on socks or shoes.
- **Crepitus:** A grinding sensation during movement due to rough joint surfaces.
- **Functional Limitations:** Challenges with walking, climbing stairs, or standing up from a seated position.

### What is Greater Trochanteric Pain Syndrome?

Greater Trochanteric Pain Syndrome (GTPS) involves pain over the lateral hip, specifically around the greater trochanter, the bony prominence on the hip's outer side. Unlike OA, GTPS stems from issues in the soft tissues, such as the gluteal tendons and bursae.

#### Signs and Symptoms of GTPS:

- **Lateral Hip Pain:** Pain over the outer hip, often radiating down the thigh and exacerbated by lying on the affected side or climbing stairs.
- **Tenderness:** Pain upon palpation of the greater trochanter.
- **Pain with Activity:** Aggravated by repetitive movements or prolonged standing.

- **Night Pain:** Discomfort when lying on the affected side, disrupting sleep.
- **Muscle Weakness:** Weakness in the hip abductors, affecting gait and mobility.

#### Key Differences Between Hip OA and GTPS

1. **Location of Pain**
  - **Hip OA:** Pain is typically deep in the groin, buttock, or thigh, potentially radiating to the knee.
  - **GTPS:** Pain is localized to the lateral hip, radiating down the outer thigh but rarely affecting the groin.
2. **Underlying Pathology**
  - **Hip OA:** A degenerative joint disease involving cartilage degradation.
  - **GTPS:** A soft tissue condition involving inflammation or degeneration of the gluteal tendons and bursae.
3. **Risk Factors**
  - **Hip OA:** Aging, obesity, joint injuries, genetics, and repetitive hip loading.
  - **GTPS:** More common in peri- and post-menopausal women due to hormonal changes affecting tendon health, as well as altered biomechanics like gait changes or muscle weakness.
4. **Impact of Hormones on Soft Tissue Health** Hormonal changes during menopause reduce tendon elasticity, increasing the risk of GTPS. In contrast, OA primarily results from mechanical factors and cartilage degradation.

#### Management and Treatment

##### Hip Osteoarthritis:

- **Exercise and Physiotherapy:** Low-impact activities like swimming or cycling help maintain joint mobility and muscle strength.
- **Weight Management:** Reducing body weight can alleviate stress on the hip joint.
- **Medication:** NSAIDs are commonly used for pain and inflammation.
- **Joint Injections:** Corticosteroid injections under ultrasound guidance can provide temporary relief and aid diagnosis in complex cases.
- **Surgery:** Total hip replacement may be necessary in severe cases.

##### Greater Trochanteric Pain Syndrome:

- **Activity Modification:** Reducing activities that exacerbate symptoms, such as prolonged standing or lying on the affected side.
- **Physiotherapy:** Strengthening the hip abductor muscles and improving flexibility is key.
- **Shockwave Therapy:** Effective in some cases for promoting tissue healing and reducing pain.
- **Corticosteroid Injections:** These can temporarily reduce inflammation for patients unresponsive to conservative treatment.
- **Surgery:** Rarely required but an option for severe or unresponsive cases.

#### Conclusion

Hip Osteoarthritis and Greater Trochanteric Pain Syndrome are distinct conditions causing hip pain, with different causes, symptoms, and treatments. While OA is a degenerative joint condition affecting cartilage, GTPS is a soft tissue disorder involving the tendons and bursae around the greater trochanter. Accurate diagnosis is essential for effective management, and consulting a healthcare professional is critical for those experiencing hip pain.

For more information see [www.genuinephysio.com](http://www.genuinephysio.com)

Image: Man with hip pain. Credit Towfiq Barbhuiya

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## Prime Minister and Health Secretary Visit Epsom Hospital to Unveil NHS Recovery Blueprint

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**Epsom Hospital** played host to Prime Minister **Sir Keir Starmer** and Health Secretary **Wes Streeting** today as they unveiled a significant national plan aimed at tackling the extensive backlog of NHS tests, checks, and treatments. The visit highlighted the government's strategy to expand healthcare capacity, streamline services, and reduce waiting times for millions of patients across the UK.

The blueprint includes a major partnership between the NHS and the private healthcare sector, intended to make additional hospital facilities, equipment, and staffing resources available. Prime Minister Starmer emphasized that healthcare reform must be "totally unburdened by dogma" and that prioritising patient outcomes over ideological constraints was essential.

The government announced plans for an extra 450,000 appointments for diagnostic tests and health checks, with local diagnostic centres operating 12 hours a day, seven days a week. GPs will have increased power to make direct referrals to these centres, reducing delays caused by administrative hurdles. Furthermore, 14 new surgical hubs will be established to handle less complex procedures, easing the strain on general hospital facilities.

Health Secretary **Wes Streeting** highlighted the urgency of these measures, pointing out that the current NHS backlog stands at 7.6 million patients awaiting elective treatments. He stressed that these reforms aim to address not only the backlog but also improve efficiency and convenience for patients.

**Amanda Pritchard**, Chief Executive of NHS England, expressed confidence in the proposed measures, stating that they would enable the NHS to deliver millions more tests, checks, and treatments annually, while also empowering patients and local healthcare providers.

While the national focus was clear, local concerns were also raised. Liberal Democrat MP for Epsom & Ewell, **Helen Maguire**, issued a statement welcoming the measures but stressing the ongoing need for infrastructure improvements at Epsom and St Helier Hospitals. She reiterated her campaign for the long-awaited Specialist Emergency Care Hospital in Sutton to be prioritised.

Cllr **Kate Chinn**, (Court Ward) Labour group leader on Epsom and Ewell Borough Council said: “It was great to see Keir in Epsom today, highlighting the great work done at SWLEOC and setting out Labour’s plans to cut NHS waiting lists. People in Epsom and Ewell know how the NHS is struggling after 14 years of Tory neglect and false promises of a badly-needed new hospital by 2030. Labour, which created the NHS, is determined to rebuild it, but it will not be an easy job.”

As the government pushes forward with its ambitious NHS recovery plan, the people of Epsom will be watching closely to see how these national promises translate into real-world improvements at their local hospital.

Related reports:

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Epsom and St Helier Hospitals in Desperate Need of Repairs

Public meeting about Epsom Hospital future

## Surrey Uni Doing the maths on virus transmission

20 February 2025



### How prepared are we for another pandemic? Mathematical insights pinpoint lessons on airborne viral transmission

Half a decade on from the start of the COVID-19 pandemic, a study by the **University of Surrey** highlights the significant impact of combined public health measures in reducing airborne viral transmission. High-quality face masks were shown to reduce transmission risk by ninefold, while doubling indoor air ventilation cut the risk by nearly a third, providing valuable insights to support future prevention strategies for respiratory diseases.

In 2020, the world came to a near standstill as rising COVID-19 cases prompted unprecedented lockdowns, travel restrictions and widespread public health measures. The World Health Organization estimates that more than three million deaths were directly attributed to the virus during the first year of the outbreak, underscoring the devastating toll of the pandemic on global health and economies.

To better understand the dynamics of airborne transmission and inform future preparations, **Dr Richard Sear**, Associate Professor at Surrey’s School of Mathematics and Physics, explored how the virus spreads during contact and the role of protective measures in reducing risk.

Dr Sear said:

“I’ve tried to measure how effective strategies, such as mask-wearing, are for the transmission of airborne viruses. This is both for any future pandemic, and for seasonal flu. I combined modelling with data from the UK’s NHS COVID-19 app. While these estimates are highly approximate, they provide guidance on the value of measures such as face masks, social distancing and improved indoor air quality, which could be tested in the future.”

Factors such as viral load, ventilation and individual susceptibility are likely to influence a significant variability in COVID-19 transmission rates, with some contacts posing a much higher risk than others. These findings highlight the importance of addressing environmental and behavioural factors in public health strategies.

In terms of personal protective equipment (PPE), high-quality face masks, such as N95/FFP2, were found to be particularly effective in reducing transmission risk, decreasing the effective reproduction number for COVID-19 transmission by a factor of approximately nine when worn by the entire UK population. Even individual use of N95 masks can lower transmission risk by threefold, no matter the duration of contact, whereas surgical and cloth masks are much less effective.

Ventilation also plays a critical role in controlling airborne transmission, as viral particles linger in poorly ventilated spaces, compounded by individual behaviours, such as close-contact interactions, speaking or coughing. By doubling the air turnover rate indoors, whether that’s through open windows and doors or increasing speed on air conditioning systems, transmission can be reduced by as much as 30%. Complementing good ventilation with physical distancing further minimises the risk.

Dr Sear added:

“The COVID-19 pandemic was terrible for many of us, which is why it’s important that we learn from our experiences. It also demonstrated how quickly we can develop and roll out vaccines when faced with a global health crisis. Moving forward, both we as individuals and our leaders have an opportunity to apply these lessons to better control respiratory diseases – not only to head off any future pandemics, but to also manage seasonal diseases such as flu and RSV.”

The study has been published in Physical Review E.

## Plant-based meat alternatives might be depressing

20 February 2025



There is mounting evidence suggesting that ultra-processed foods (UPF) are bad for our health, but if you stick to a vegetarian diet, is that still the case? Plant-based meat alternatives (PBMA) are considered to be ultra-processed foods and may be associated with similar harms.

In the first study of its kind, published in Food Frontiers, researchers from the University of Surrey found that vegetarians who consumed PBMA had a 42% increased risk of depression compared to vegetarians who refrained from PBMA.

The study analysed data from the UK Biobank and found no notable differences in intake of sodium, free sugar, total sugar, or saturated fatty acids between those vegetarians who ate PBMA and those who did not.



The researchers did find, however, that those who eat PBMA had higher blood pressure and C-reactive protein (CRP) levels, a marker of inflammation, and lower levels of apolipoprotein A, a protein associated with HDL, a “good” cholesterol; PBMA consumption was, however, also linked to a reduced risk of irritable bowel syndrome (IBS) by 40%.

Professor Nophar Geifman, from the School of Health Sciences at the University of Surrey and senior author of the study, said:

“The overall findings are reassuring, suggesting that plant-based meat alternatives may be a safe option when they are part of an overall balanced diet. However, the potential link between these types of food, inflammation and depression warrants further investigation.”

The study presented some limitations due to the data collected, which was predominantly from a white population in the UK, and dietary information only being gathered at the beginning of the study, not accounting for potential changes over time.

Professor Anthony Whetton, co-author of the study from the School of Veterinary Medicine at the University of Surrey, said:

“Ultra-processed plant-based meat alternatives can be a useful way for people to transition to a vegetarian diet effectively, and that helps with sustainable agricultural practices. Further research, including longitudinal studies and trials with more diverse populations, is necessary to confirm these findings and the relationship between vegetarian foods and mood.”

## Surrey pharmacies need a better financial prescription

20 February 2025



Pharmacy owners in Surrey say “enough is enough” as they complain working 12-hour days and barely breaking even. One pharmacist said it has to dispense just over 6,000 prescriptions a month to just about balance the books.

Over the last decade or so, the funding community pharmacies received from the government and NHS have been cut by 40 per cent, with 1,500 closing in the last 10 years.

The government announced a £26 billion boost for the NHS and social care in the budget. A Department of Health and Social Care spokesperson said: “We are committed to working with the pharmacy sector and we will set out further details on allocation of funding for next year in due course.”

Asma’a Al-hindawi has worked at her family-owned pharmacy in Horley, after graduating from university in 2010. What used to be a family passion, is now a tough grind. She said: “It’s a lot of hard work. Sometimes me and my sister have to work 12-13 hours a day, six days a week, and still we’re only breaking even.”

Pharmacies are paid on a piecemeal basis for dispensing prescriptions issued by GPs. This makes up most of the community pharmacies’ income. In 2012, the piecework fee was £2.75 per item; but now, despite inflation, the fee stands at £2.18 per prescription dispensed.

Despite her family business making a loss, Asma’a said: “I feel I have a moral obligation to work this hard to keep the pharmacy running and to help the community with their healthcare.” She explained the pharmacy is a “community service” which he has stuck by despite often getting verbal abuse.

She said the NHS “doesn’t catch up with the prices of the market” when the market cost of medicine increases. Sometimes items are out of stock so the pharmacy has to buy more expensive branded products, but the pharmacy still only receives the £2.18 fee.

“It’s an ethical dilemma,” said Asma’a, “because you can’t tell a patient you cannot sell the medicine otherwise you will make a loss.” Speaking to the Local Democracy Reporting Service in a bustling pharmacy, with shelves high of medicine, Asma’a said: “If the pharmacy is this busy, it should be making a profit.”

Dorking & Horley MP Chris Coghlan (Liberal Democrat) said: “We really need to make sure our pharmacies are paid properly for the work they’re doing so they can survive and keep helping the community.”

John Bell, who runs South Street Pharmacy in Dorking, started his own mini campaign in protest against the funding situation. He turned off the lights of the pharmacy and posted a note on the window stating: “Why are the lights out in pharmacies? Find out more inside.”

He started the campaign to raise awareness that 500 community pharmacies have closed across the country over the last year. “There comes a point when enough is enough,” said John, explaining pharmacies can’t afford to keep pouring money into a business just to keep it afloat.

The Dorking pharmacist said he makes “zero money” from the main pharmacy business and has to subsidise it with selling the extra hair accessories, sun cream and glasses on the shop floor. Already running at a “skeleton staff”, John said he is dreading the increase in employers’ National Insurance contributions. He said staffing costs have gone up by 50 per cent in 10 years.

Mr Coghlan has written to Wes Streeting, Secretary of State for Health and Social Care, to “stop the decimation of independent pharmacies”. He wrote: “It’s unacceptable that pharmacies are subsidising NHS work out of their own pockets while being expected to take on more responsibilities.”

In his letter, the Lib Dem MP has urged Mr Streeting to review and increase NHS reimbursement rates to reflect the “true cost” of dispensing and running a pharmacy. Mr Coghlan also asked for employers’ national insurance rise to be “halted” to prevent a “further financial blow” on pharmacies and health providers.

A Department of Health and Social Care spokesperson said: “Community pharmacy has been neglected for years, but it has a vital role to play in the shift of care from hospital to the community as we reform the health service through our 10 Year Health Plan.

“We commend the hard-working pharmacists working to support their communities across England and there is never a justification for threatening behaviour.”

Image: MP Chris Coghlan (left) visiting Asma’a (right) at her family-run pharmacy in Horley. (Credit: Emily Dalton/LDRS)