



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Tuesday 20190806

Breastfeeding (Hindustan:20190806)

http://epaper.livehindustan.com/imageview_176158_104105546_4_1_06-08-2019_i_7.pagezoomsinwindows.php

स्तनपान को लेकर जागरूकता जरूरी

नई दिल्ली | प्रमुख संवाददाता

स्तनपान को बढ़ावा देने के लिए जिला स्तर पर काम किए जाने की जरूरत है। शिशु जन्म के एक घंटे के भीतर स्तनपान कराए जाने के फायदे की जानकारी आम लोगों तक पहुंचाना बेहद जरूरी है। राजधानी दिल्ली के एक होटल में सोमवार को 'भारत में स्तनपान विषय' पर आयोजित कार्यक्रम में कुछ इसी प्रकार के विचार व्यक्त किए गए।

कार्यक्रम में स्वास्थ्य एवं परिवार कल्याण मंत्रालय के उपायुक्त (बाल एवं किशोर स्वास्थ्य) डॉ. अजय खेड़ा ने कहा कि बच्चों के जीवन और स्वास्थ्य को सुरक्षित रखने के लिए जरूरी है कि स्तनपान को बढ़ावा देने वाले आईएमएस अधिनियम के बारे में ज्यादा से ज्यादा लोगों को जागरूक किया जाए। इससे जिला स्तर पर आईएमएस अधिनियम 2003 को प्रभावी ढंग से लागू करने में मदद मिलेगी। डॉ. खेड़ा ने

कहा कि सरकार स्तनपान को बढ़ावा देने के लिए स्वास्थ्य प्रणाली को और मजबूत बनाएगी। यह इसलिए महत्वपूर्ण है क्योंकि 80 फीसदी प्रसव स्वास्थ्य इकाइयों में हो रहे हैं। इस मौके पर ब्रेस्टफीडिंग प्रमोशन नेटवर्क ऑफ इंडिया के डॉ. अरुण गुप्ता ने कहा कि आईएमएस जैसे मजबूत कानून को लागू करने के लिए स्वास्थ्य प्रणाली अभी कमजोर है। उन्होंने इसके अधिनियम की निगरानी जरूरी बताई।

घुटना या कोहनी के दर्द

National Bone and Joint Day 2019 आज: खून की चंद बूंदों से मजबूत होंगी हड्डियां, जानें कहां डॉक्टरों ने किया सफल इलाज (Hindustan:20190806)

<https://www.livehindustan.com/health/story-national-bone-and-joint-day-2019-today-know-how-drop-of-blood-make-bones-strong-in-hindi-2670163.html>

घुटना या कोहनी के दर्द से परेशान लोगों के लिए राहत की खबर है। इस दर्द से निजात पाने के लिए मरीजों को अब दर्द निवारक स्टेरॉयड लेने की जरूरत नहीं है। मरीज के चंद बूंद खून से बनने वाले प्लेटलेट्स रिच प्लाज्मा (पीआरपी) से ही दर्द से निजात मिल सकती है। इतना ही नहीं, यह मांसपेशियों और हड्डियों को भी मजबूत करता है। बीआरडी मेडिकल कालेज के हड्डी रोग विभाग में प्रयोग के तौर पीआरपी से इलाज शुरू हुआ है।

हड्डी रोग के विभागाध्यक्ष डॉ. पवन प्रधान ने बताया कि इस विधि में प्लेटलेट्स रिच प्लाज्मा (पीआरपी) में मरीज के ही खून का प्रयोग किया जाता है। महज 10 से 15 मिलीलीटर खून निकालकर विभाग में सेंट्रीफ्यूजन मशीन में प्लाज्मा तैयार किया जाता है। यह प्लाज्मा इंजेक्शन के जरिए दर्द वाले स्थान पर लगाया जाता है। अमूमन एक या दो इंजेक्शन से बीमारी को काफी हद तक ठीक किया जा सकता है।

टेनिस एल्बो के 20 मरीजों पर हुआ प्रयोग : स्पोर्ट्स इंजरी सेल के प्रभारी डॉ. अमित मिश्रा ने बताया कि टेनिस एल्बो का दर्द झेल रहे 20 मरीजों पर पीआरपी का प्रयोग किया गया। इसने जबर्दस्त असर दिखाया। मरीजों को दर्द से राहत मिली। उनकी मांसपेशियां मजबूत हुईं। हड्डियों का घिसाव कम हुआ। दूसरे जोड़ों के दर्द में इसका प्रयोग किया जा सकता है।

असहनीय दर्द देता है टेनिस एल्बो

नियमित व्यायाम न करने, चोट लगने या कम्प्यूटर पर ज्यादा देर तक काम करने से कोहनी के बाहर की तरफ दर्द होने लगता है। इसे टेनिस एल्बो कहा जाता है। इससे पीड़ित व्यक्ति को भारी सामान उठाने पर दर्द होने लगता है। हाथ मिलाना, ब्रश करते समय, सब्जी काटते समय, मुंह धोने या किसी वस्तु को तेज दबाने पर दर्द एकदम से बढ़ता है। दर्द बढ़ने के साथ ही कोहनी में सूजन हो जाती है। अंतरराष्ट्रीय क्रिकेटर सचिन तेंदुलकर को भी यह बीमारी रही।

अगले चरण में घुटना दर्द के मरीजों पर होगा प्रयोग

डॉ. प्रधान ने बताया कि टेनिस एल्बो के मरीजों में पीआरपी के प्रयोग के परिणाम उत्साहजनक रहे। मरीजों को दर्द से निजात के लिए स्टेरॉयड लेने की जरूरत नहीं पड़ी। यह मरीजों को स्टेरॉयड के नुकसान से भी बचाता है।

मच्छरों की रोकथाम

आ गया है जादुई फॉर्मूला...अब मच्छरों को मार भगाएगा यह स्पेशल बैक्टीरिया! (Dainik Jagran:20190806)

<https://www.jagran.com/lifestyle/health-through-this-magical-formula-this-bacteria-will-help-in-eradicating-mosquito-borne-diseases-19463096.html>

बारिश के मौसम के साथ ही सभी मच्छरों से होने वाली बीमारियों के उपाय ढूंढने लगते हैं। एक्सपर्ट्स का भी मानना है कि मच्छरों की रोकने के लिए इंसान को नए नुस्खों की सख्त ज़रूरत है।

नई दिल्ली, जेएनएन। मानसून के सुहाने मौसम के साथ लोग उसके साथ आने वाले मच्छरों के लिए भी कई तरह के उपाय करने में जुट जाते हैं। हालांकि, मच्छरों की रोकथाम पर काम कर रहे एक्सपर्ट्स का मानना है कि बीमारी वाले मच्छरों की रोकने के लिए इंसान को नए नुस्खों की सख्त ज़रूरत है। उनका मानना है कि फिलहाल दो ऐसे तरीके भी हैं जो बेहद कारगर साबित हो रहे हैं।

अनोखा प्रयोग

दो साल पहले सिंगापुर और जकार्ता में मच्छरों को कम करने के लिए अनोखा प्रयोग किया गया था। जिसमें नर मच्छरों की बनावट में बदलाव करके उनकी बच्चे पैदा करने की ताकत को खत्म कर दिया था। इस तरह से मच्छरों की नई पीढ़ी पैदा होने से रोकी जा रही है।

क्या मदद करेगा वोल्बाशिया

वैज्ञानिकों को इससे भी अच्छा तरीका मिल गया है। वोल्बाशिया नाम का एक खास बैक्टीरिया है। ये बैक्टीरिया ऐसे नहीं पाया जाता। ये किसी न किसी कीड़े के शरीर में ही पैदा होता है, पनपता है और फिर नई पीढ़ी को जन्म देकर खत्म हो जाता है। वोल्बाशिया ऐसा बैक्टीरिया है जो जिस भी कीड़े के शरीर में होता है, उसको ज़ीका, डेंगू और चिकनगुनिया जैसी बीमारियों के वायरस से लड़ने की ताकत देता है।

आ गया नया फॉर्मूला

अब वैज्ञानिक पहले मादा मच्छरों को वोल्बाशिया बैक्टीरिया से संक्रमित कराते हैं। फिर इन मच्छरों को खुली हवा में छोड़ते हैं। ये मादा मच्छर जब अंडे देती हैं, तो बैक्टीरिया नई नस्ल में पहुंच जाते हैं और मच्छरों की नई पीढ़ी में ज़ीका, डेंगू और चिकनगुनिया जैसे वायरस आने से रोकते हैं। इससे बीमारी के ये खतरनाक वायरस फैल नहीं पाते।

इस नुस्खे का सुझाव ऑस्ट्रेलिया की मोनाश यूनिवर्सिटी के वैज्ञानिकों ने दिया था। दुनिया के तमाम वैज्ञानिक मानते हैं कि अगर ये नुस्खा कामयाब हुआ, तो मच्छरों से फैलने वाली बीमारियां रोकने का जादुई फॉर्मूला साबित हो सकता है।

डेंगू

डेंगू का मतलब बुखार-बदन दर्द ही नहीं है, हार्ट को भी होता है बड़ा नुकसान (Dainik Jagran:20190806)

<https://www.jagran.com/lifestyle/health-know-the-impact-of-dengue-fever-on-the-heart-these-tips-will-help-you-19445702.html>

जी हां डेंगू का असर दिल पर भी पड़ता है। जानते हैं कि डेंगू किस तरह आपके दिल को नुकसान पहुंचाता है।

नई दिल्ली, जेएनएन। अक्सर माना जाता है कि डेंगू होने पर बुखार होती है और बदन दर्द की शिकायत रहती है। यह बात सच भी है कि डेंगू में यह सब होता है और इससे रिकवर होने में काफी वक्त भी

लगता है। लेकिन, क्या आप जानते हैं कि डेंगू होने से आपके दिल पर भी काफी असर पड़ता है। ऐसे में जानते हैं कि आखिर डेंगू होने पर दिल पर क्या असर पड़ता है...

बता दें कि डेंगू होने पर शरीर में प्लेटलेट्स की मात्रा काफी कम हो जाती है और ब्लड प्लेटलेट्स कम होने से दिल पर गहरा असर पड़ सकता है। इसलिए डेंगू होने पर दिल का भी खास ख्याल रखना आवश्यक है। कई रिपोर्ट्स में सामने आया है कि अगर प्लेटलेट्स 45000 से नीचे चली जाए तो दिल पर गहरा असर हो सकता है।

वहीं इस दौरान मरीज पर तुरंत ध्यान न दिया जाए तो यह जानलेवा भी साबित हो सकता है। बताया जाता है कि दिल के आस-पास लिक्विड पदार्थ जमा होने से दिल की मांसपेशियों में कमजोरी और रक्त धमनियों में रिसाव जैसी गंभीर समस्याएं डेंगू की वजह से हो सकती हैं।

इसलिए डेंगू के वक्त ईसीजी जरूर करवा लें और दिल संबंधी कोई भी दिक्कत होने पर इसका इलाज शुरू करें। वैसे डेंगू होने पर ठंड लगने के बाद अचानक तेज बुखार होता है और सिर, मांसपेशियों और जोड़ों में दर्द होता है। वहीं आंखों के पिछले हिस्से में दर्द शुरू होता है और बहुत ज्यादा कमजोरी लगना, भूख न लगना और जी मितलाना और मुंह का स्वाद खराब होना शुरू हो जाता है।

कैसा होता है डेंगू का मच्छर?

जिस मच्छर के काटने से डेंगू होता है, उस मच्छर का नाम होता है माजा एडीज मच्छर। अगर इस मच्छर के दिखने की बात करें तो यह दिखने में भी सामान्य मच्छर से अलग होता है और इसके शरीर पर चीते जैसी धारियां बनी होती हैं। यह मच्छर अक्सर रोशनी में ही काटते हैं।

Microbes (The Asian Age:20190806)

<http://onlinepaper.asianage.com/articleetailpage.aspx?id=13525544>

How microbes in our body can affect our health



Zarrar Khuhro

How many times have you been told to “listen to your gut”? Generally, this is taken to mean that we should pay heed to our instinctual responses to people and situations, and take the little intuitive warnings seriously. Now, we may have to take this age-old piece of advice a bit more literally.

The human gut is often referred to as “the second brain”, and this isn’t hyperbole as the gut contains some 100 million neurons — more than in either the spinal cord or the peripheral nervous system. It can even “talk” to your brain thanks to a complex network of neurons, hormones and chemicals... and the brain talks back. You’ve certainly felt this, as in when you get that sinking feeling in your stomach when confronted with a stressful situation — that’s a conversation between your brain and your gut about how freaked out you are.

The gut is also a world in and of itself, an entire internal ecosystem inhabited by tens of trillions of microorganisms — bacteria, fungi, protozoa and viruses — known collectively as the gut microflora. In all, the combined DNA of these tiny critters is 100 times more than of the DNA in all the cells of your body.

Up until recently, we thought we understood the rather cosy symbiotic relationship we had with these critters we hosted: they digested our food and kept the pipes clean and we provided them a nice warm place to live. Oh and when we died, they would help decompose us by eating us from the inside out.

Now it emerges that the legions that live within us can affect us in ways we never dreamt were possible. Microflora are passed down the generations, starting with the first gulp of mother’s milk and “good” microflora are now known to play a part in a child’s early cognitive development.

Subsequently, the composition of your gut bacteria depends in large part on your diet and lifestyle — and varies from place to place and lifestyle to lifestyle. If external factors can transform gut bacteria and lead to changes in our health, does the reverse hold true as well? An examination of the bacteria found in the stools of elite athletes revealed the presence of a strain known as *Veillonella atypical*, which aids in breaking down lactic acid and is not present in such numbers among non-athletes. Their curiosity piqued, scientists dosed a group of lab mice with *Veillonella* and found that their athletic endurance increased considerably. How far are we from a future where you could boost your own athletic ability with a course of gut bacteria?

Even more fascinating is the link between gut bacteria and mental health: Consider that mental stress causes changes in gut bacteria, leading some to become pathogenic and attack the bodies’ immune system. The lack of certain types of gut bacteria also impacts mental health. Studies in Europe this year found that people suffering from chronic depression all lacked several species of gut bacteria, which begs the question: did depression cause these varieties to die off or did the lack of these varieties cause depression? This question opens up tantalising possibilities.

Trillions of dollars are spent exploring outer space, but perhaps it’s well past time that we took a closer look at the inner space within us. Were we to do so, my gut feeling is that we’ll find a whole new world waiting for us.

By arrangement with *Dawn*



<http://onlinepaper.asianage.com/article/detailpage.aspx?id=13525657>



OBESITY LINKED WITH MULTIPLE DISEASES: STUDY

Melbourne: Researchers have found the strongest evidence yet of a causal relationship between obesity and a wide range of serious conditions, including cardiovascular disease, diabetes, cancer, and neurological, musculoskeletal and respiratory afflictions.

The study draws data from a research database holding health and genetic information from half a million volunteers, to analyse associations between body mass index (BMI) and a range of disease outcomes in 337,536 people. "In this study we used a genetic approach to seek evidence for true health effects associated with higher body mass index, which assesses our weight against our height and is commonly used to measure obesity," said a researcher. — *PTI*

Heart disease, stroke-related deaths on rise due to obesity (New Kerala:20190806)

<https://www.newkerala.com/news/read/187481/heart-disease-stroke-related-deaths-on-rise-due-to-obesity.html>

Sydney, Aug 5 : Heart disease and stroke mortality rates have almost stopped declining in many high-income countries and are even increasing in some countries, reveals a new study.

For the study, published in the International Journal of Epidemiology, researchers from the University of Melbourne analysed trends in cardiovascular disease mortality, which consists of mainly heart disease and stroke -- in 23 high-income countries since the year 2000.

The study found that cardiovascular disease mortality rates for people aged 35 to 74 years are now barely declining, or are increasing, in 12 of the 23 countries.

Cardiovascular disease mortality rates have increased in the most recent years in US and Canadian females, while in Australia, the UK and New Zealand annual declines in deaths from cardiovascular diseases are now 20 to 50 per cent.

"Research suggests that obesity, or at least poor diet, may have been a significant contributor to the slowdown in the decline of cardiovascular disease deaths," said Alan Lopez, Professor at the University of Melbourne.

"Each of these countries have very high levels of obesity. In Australia, close to one-third of adults are obese," Lopez said.

The researchers observed that obesity is the main risk factors for cardiovascular disease mortality -- others include smoking, high blood pressure, high cholesterol and diabetes.

"Failure to address these issues could confirm the end of the long-term decline in cardiovascular disease deaths and threaten future gains in life expectancy." concluded study's co-author Tim Adair, a researcher at the varsity.

Gastroenterology

Could the use of stomach acid drugs raise the risk of allergies? (Medical News Today:20190806)

<https://www.medicalnewstoday.com/articles/325949.php>

New research has linked the use of prescription drugs for stomach acid to a higher likelihood of developing allergies afterward.

New research finds a link between PPIs and the risk of allergies.

Due to the study's design, the results do not prove that gastric acid reducers — such as proton pump inhibitors (PPIs) — actually cause allergies.

In a Nature Communications paper about their work, however, the authors suggest that the findings "infer" an increased risk of allergy.

The data for the study came from health insurance records that cover around 8.2 million people living in Austria. This number represents 97% of the Austrian population.

A team from the Medical University of Vienna (MedUni Vienna) in Austria used the epidemiological data to analyse the use of anti-allergy drugs following the use of prescription medications that reduce stomach acid.

As the data came from insurance claims, the team did not analyze actual incidence of allergies, instead using patterns of prescription anti-allergy medications as stand-ins.

The analysis showed that following prescriptions for stomach acid inhibitors, the use of prescription anti-allergy drugs was higher compared with other types of drug.

According to the findings, it appears that people who took stomach acid medications such as PPIs had a two-to-three times higher chance of later receiving prescriptions for anti-allergy drugs.

Gastric acid and PPIs

Doctors prescribe PPIs to treat various gastric acid conditions, such as gastroesophageal reflux disease. This occurs when acid from the stomach flows backward into the esophagus, or the pipe along which food travels.

Estimates suggest that more than 15 million people received PPI medications in the United States in 2013.

Stomach acid drugs may cause depression

Researchers suggest that PPIs may cause major depressive disorder by disrupting gut bacteria.

The researchers note that gastric acid is vital for food digestion. The acid contains enzymes that break down proteins before they undergo further processing.

Gastric acid also protects the digestive system from infection by bacteria and other disease causing agents.

Reducing the production of gastric acid could increase opportunities for allergy causing substances to enter the gut unchallenged. Such an influx has the potential to trigger or worsen an allergy.

Do not use PPIs 'longer than necessary'

Principal investigator Erika Jensen-Jarolim, of the Institute of Pathophysiology and Allergy Research at MedUni Vienna, cautions people not to use gastric acid inhibitors "any longer than necessary."

"They prevent protein digestion, change the microbiome in the gastrointestinal tract, and increase the risk of allergic reactions," she adds.

Prof. Saad Shakir, director of the Drug Safety Research Unit in the United Kingdom, describes the research as "hypothesis testing." He was not involved in the study.

He agrees that PPIs and other stomach acid suppressors can weaken the defense mechanism that normally prevents many substances traveling farther than the stomach.

He suggests that using prescriptions as surrogate markers for allergy diagnoses "is a reasonable approximation."

Prof. Shakir concludes that although the study does not answer the question for sure, "it strengthens the hypothesis regarding the association between taking acid suppressants and the development of allergic symptoms."

Hepatitis A

Hepatitis A becomes health emergency in Florida (Medical News Today:20190806)

<https://www.medicalnewstoday.com/articles/325951.php>

Hepatitis A is a viral disease that used to be fairly uncommon in the United States. This year, however, cases of hepatitis A infection have escalated to a worrying degree. This month, Florida has declared hepatitis A a health emergency.

The state of Florida has now declared the hepatitis A outbreak a 'public health emergency.'

Hepatitis A is a disease that affects the liver, and which can occur when a person drinks water or eats food that was contaminated by the fecal matter of another person infected with hepatitis A.

A person could also contract this virus through unprotected oral or anal sex.

The hepatitis A virus triggers symptoms similar to those of the flu, which are relatively mild and usually last no longer than 2 months. Sometimes, however, the virus can affect liver health to the extent that it may threaten liver function.

Throughout Europe and the United States, there have recently been few cases of this disease, since hepatitis A is preventable through vaccination.

In the past year, however, various regions of the United States have witnessed a steep rise in the number of hepatitis A cases. Now, the state of Florida has declared this viral disease a public health emergency.

A call for vaccination against hepatitis A

Over the past year, officials have recorded 2,586 new cases of hepatitis A, of which 72% required hospitalization. As many of 65 new cases occurred in the past 2 weeks alone.

This is a steep increase from the year before when there was a total of 548 cases of hepatitis A throughout the entire year. Most of these cases occurred in adults.

"I am declaring this Public Health Emergency as a proactive step to appropriately alert the public to this serious illness and prevent further spread of hepatitis A in our state," announces the Florida Surgeon General Dr. Scott Rivkees in an official statement.

"The best way to prevent hepatitis A is through vaccination. It is important that we vaccinate as many high risk individuals as possible in order to achieve herd immunity."

Florida Surgeon General Dr. Scott Rivkees

It is unclear why the cases of hepatitis A have increased at such an alarming rate, but officials are looking into the matter. A health emergency will also allow them to invest more money into testing and treatment of the disease.

Bison burgers linked to E. coli outbreak

Experts warn that the current E. coli outbreak in the United States is due to contaminated bison meat burgers.

This is in accordance with the Florida Statute 381.00315(1)(c), which defines a "public health emergency" as "any occurrence, or threat thereof [...] which results or may result in substantial injury or harm to the public health," and which allows the State Health Officer to "take actions that are necessary to protect the public health."

In the meantime, state officials advise individuals to get vaccinated against the hepatitis A virus and to maintain good personal hygiene habits.

The lieutenant governor of Florida, Jeanette Nunez, tells Florida inhabitants, in a post on Twitter, that she and other officials "urge vaccination and stress the importance of washing your hands regularly."

Dr. Eugene Schiff, director for liver diseases at the University of Miami Miller School of Medicine, FL, has commented on the outbreak in Florida. He notes that homelessness may be an important factor at play in the current health emergency.

"Homelessness is a big issue throughout the country and in Florida, and they are at higher risk to spread hepatitis A around. It is more epidemic in the homeless community," claims Dr. Schiff.

He also emphasizes that the disease is "entirely preventable" through vaccination, noting that "[i]t is not that this is a virulent strain, there is just a larger risk if people haven't been vaccinated."

Dr. Neil Gupta, who is branch chief of the Centers for Disease Control and Prevention's (CDC) Division of Viral Hepatitis in Atlanta, GA, also suggests that homelessness increases the risk of infection. He argues that state policy-makers should make sure that the groups most at risk receive the anti-hepatitis A vaccine.

"The most effective response measures are to increase vaccinations to the at risk groups through coordinated, targeted vaccination efforts to stop the outbreak," notes Dr. Gupta.

Depression

Chronic depression: Form of CBT may fail after 2 years (Medical News Today:20190806)

<https://www.medicalnewstoday.com/articles/325945.php>

New research compares the long term effect of two different forms of therapy for chronic depression and finds that the benefits of one approach, which experts developed specifically for this form of depression, fade 2 years after the treatment ends.

New research assesses the long term benefits of a form of CBT for people with chronic depression.

According to estimates, 3–6% of people are likely to experience chronic depression at some point during their life.

Unlike episodic depression, chronic depression — also known as persistent depressive disorder or dysthymia — is a condition that lasts for 2 years without interruption.

However, it's not just the duration of the condition that separates chronic depression from episodic major depression.

Chronic depression significantly interferes with day-to-day activities, raises the risk of suicide, and is more likely to occur alongside other psychiatric disorders.

Chronic depression is also likely to be more severe and more difficult to treat than episodic major depression.

In chronic depression, the chances of relapse are higher, so in addition to antidepressants, psychotherapy, or a combination of the two, people with chronic depression need a form of maintenance therapy to ensure that they stay in remission.

So far, the cognitive behavioral analysis system of psychotherapy (CBASP) has been the only type of therapy that experts have designed specifically for treating chronic depression, and several trials that compared it with antidepressants found the approach to be successful.

But, how does CBASP fare in the long term? New research, appearing in the journal *Psychotherapy and Psychosomatics*, investigates.

Elisabeth Schramm, from the department of psychiatry and psychotherapy at the University of Freiburg in Germany, is the lead author of the new study, which compares the benefits of CBASP with those of "supportive psychotherapy" at 1 and 2 years after the end of the treatment.

CBASP benefits fade 2 years after treatment

Some people define CBASP as a form of cognitive behavioral therapy (CBT), but, in addition to behavioral elements, CBASP includes interpersonal, cognitive, and psychodynamic strategies in its approach.

In CBASP, the therapist helps the client break down distressing interpersonal interactions and determine crucial points at which said interactions could have evolved in a different way if the client had had a different attitude.

Supportive psychotherapy, on the other hand, focuses on improving the self-esteem, resilience, and adaptability of the individual by encouraging them and offering them help to find practical solutions to new situations that might be distressing.

Internet-based CBT effective for treating severe depression

New research finds that engaging in CBT via an app can help relieve treatment-resistant depression.

In the current study, Schramm and colleagues compared the two therapies in a "prospective, multicenter, evaluator-blinded, randomized clinical trial" of 268 people who had just received a diagnosis of chronic depression.

The first treatment consisted of 32 sessions of either CBASP or supportive therapy over 48 weeks. Schramm and team assessed the rate of "well weeks" after 1 and 2 years as the primary outcome.

Secondary outcomes included "clinician- and self-rated depressive symptoms, response/remission rates, and quality of life."

The results revealed that although CBASP is more beneficial than supportive therapy after 1 year, this type of therapy loses its effectiveness 1–2 years after completion of the treatment. Schramm and colleagues conclude:

"This suggests the necessity of maintenance treatment for early-onset chronically depressed patients remitted with CBASP during the acute therapy phase, as well as the [...] integration of other treatment strategies, including medication for those who did not reach remission."

Women Health

Testosterone may improve women's sex lives after menopause (Medical News Today:20190806)

<https://www.medicalnewstoday.com/articles/325942.php>

A wide-ranging review of 36 trials found that testosterone may have profound positive effects on sexual function and well-being in postmenopausal women.

New research extols the benefits of testosterone for the sexual well-being of older women.

This review, published in *The Lancet Diabetes & Endocrinology*, included blinded randomized controlled trials of testosterone treatment that had lasted for at least 12 weeks.

In total, the research team analyzed 46 reports of 36 trials that had collectively included 8,480 participants.

The authors of the review found that the sexual health of postmenopausal women could greatly benefit from testosterone treatment.

Testosterone matters for women, too

People usually think of testosterone as a hormone that only males benefit from, but it has its place and function in the female body.

It helps women's libido and orgasms, for example, and it has other functions that contribute to muscle strength, mood, metabolic function, and the ability to think, remember, and reason.

Past research has also explored this topic, but the dosage and formulations are targeted toward men, and not much is known about testosterone's safety profile or side effects in women.

The trials examined in the current review took place between 1990 and 2018, and each compared testosterone treatment with either a placebo or an alternative hormone treatment, such as estrogen, progestogen, or both.

The authors looked at how the treatments affected sexual function, as well as a number of other physical health markers, including cardiovascular, cognitive, and musculoskeletal health. In addition, they looked at how testosterone treatment impacted mood, breast density, lipid profiles, and excess hair growth.

Multiple benefits

The authors noted that there were consistent benefits to the participants' sexual function, which went beyond increasing the number of satisfactory sexual encounters.

They also observed that participants had increased libido and heightened orgasms while taking the treatment, as well as improved self-image. In addition, the participants reported fewer sexual concerns and less sex-related distress.

"The beneficial effects for postmenopausal women shown in our study extend beyond simply increasing the number of times a month they have sex," says senior study author Prof. Susan Davis, of Monash University, in Melbourne, Australia.

Why do women have less sex as they age?

Apart from physiological changes, what are some other factors that affect an older woman's sex life?

"Some women who have regular sexual encounters report dissatisfaction with their sexual function, so increasing their frequency of a positive sexual experience from never or occasionally to once or twice a month can improve self-image and reduce sexual concerns — and may improve overall well-being," she explains

On the other hand, the authors of the review found no benefits to cognition, bone density, muscle strength, or body composition. They likewise found no improvements to depression or psychological well-being.

Few side effects, but more data is necessary

The researchers determined that the participants had experienced no serious side effects regarding insulin, glucose, blood pressure, or breast health during their treatment. Also, in nine studies, they found that women taking testosterone treatment were not more likely to experience a heart attack or stroke.

However, the specific formulation of the treatment did seem to make a difference in a few areas that would warrant alternatives.

For example, the team discovered that participants who took oral formulations experienced worsening lipid profiles, including increased levels of low-density lipoprotein cholesterol and reduced levels of high-density lipoprotein cholesterol.

Triglycerides and total cholesterol levels were also on the upswing in these participants.

While this review encompassed 46 reports on 36 trials, confirming the findings will require more information.

However, it is certainly an area worth further exploration, and specific, custom formulations are necessary for the women who could potentially benefit.

"Nearly a third of women experience low sexual desire at midlife, with associated distress, but no approved testosterone formulation or product exists for them in any country, and there are no internationally agreed [upon] guidelines for testosterone use by women," says Prof. Davis.

"Considering the benefits we found for women's sex lives and personal well-being, new guidelines and new formulations are urgently needed."

Prof. Susan Davis

Cancer

How a dietary change might boost cancer therapy (Medical News Today:20190806)

<https://www.medicalnewstoday.com/articles/325939.php>

In a recent study, mice that ate a diet with reduced levels of a particular amino acid responded better to cancer treatments. The findings are intriguing, but the authors call for caution.

Meat and eggs contain particularly high levels of methionine.

Doctors and other experts now understand the significant role that nutrition plays in health.

In fact, it is possible to manage some conditions, such as diabetes and hypertension, through diet alone.

However, the role of nutrition in preventing or treating cancer is not so clear cut.

Jason Locasale, the senior author of a recent study, explains: "Cancer is, in many ways, more difficult, because it's different diseases with multiple forms, and often defined at a molecular level, so we're just beginning to understand how diet and nutrition are influencing that."

Their paper, published in the journal Nature, looks at the role of an amino acid called methionine in cancer treatment.

What is methionine?

Methionine is necessary for our cells to function. Experts refer to it as an essential amino acid because our bodies cannot make it. People need to take it in through the food that they eat.

Many foods contain methionine, but meat and eggs contain particularly high levels.

This amino acid has intrigued researchers for many years. For instance, a study published in 1993 found that restricting methionine consumption extended the lifespan of rats.

Later studies found a role for the amino acid in metabolic conditions. One of these studies showed that it could prevent diet induced obesity in an animal model.

Some researchers have begun to examine its potential role in cancer treatment. Methionine piqued researchers' interest because it plays an important role in a cellular mechanism that some chemotherapy drugs and radiation therapy target. Scientists know this pathway as one-carbon metabolism.

Also, some earlier studies have hinted that restricting methionine in the diet might have an anticancer effect. The authors explain:

"We, therefore, reasoned that methionine restriction could have broad anticancer properties by targeting a focused area of metabolism and that these anticancer effects would interact with the response to other therapies that also affect one-carbon metabolism."

Testing methionine restriction

To investigate, the researchers used a variety of cancer models. Firstly, they tested two types of treatment resistant cancer tissue taken from humans and grafted onto mice.

When the scientists fed mice a diet with reduced levels of methionine, tumor growth slowed compared with mice fed a standard diet.

When they looked into the metabolic details, as expected, they found that restricting methionine reduced tumor growth by hindering one-carbon metabolism.

Next, the scientists used a common chemotherapy drug in combination with a methionine restricted diet. They used a low dose of the drug, which was insufficient to shrink the tumor. However, according to the authors, the low methionine diet combined with the drug led to a "marked inhibition of tumor growth."

Schizophrenia: Common amino acid could hold key, study finds

A recent study links schizophrenia with an overload of methionine in pregnant mothers.

When the researchers investigated a type of mouse sarcoma that does not respond to radiation therapy, they found that a methionine restricted diet alone was not sufficient to slow tumor growth. However, when these mice also received a dose of radiation, tumor growth was significantly slowed.

In the next phase of their study, the scientists fed six healthy humans a diet with low levels of methionine for 3 weeks. They measured similar metabolic effects to those seen in the mice models.

"This study suggests that dietary restriction of methionine induces rapid and specific metabolic profiles in mice and humans that can be induced in a clinical setting."

Senior author, Jason Locasale

Locasale believes that "[b]y disrupting metabolic pathway with the dietary restriction of methionine, it might be possible to enhance the effects of chemotherapies that target these aspects of cancer metabolism."

As the authors explain, these results are preliminary, and this approach might not be effective in humans or for all cancer types. In fact, they believe that methionine restriction could, perhaps, boost the growth of some cancers.

In short, the researchers make it clear that this is not a call for people to become vegan.

Although this type of dietary restriction will not reach the clinic for some time, this is an important step in understanding how diet can influence cancer growth. As the authors conclude:

"This study may help to further establish principles of how dietary interventions may be used to influence cancer outcomes in broader contexts."

Asthma

Multiple genes affect risk of asthma, hay fever, eczema: Study (New Kerala:20190806)

<https://www.newkerala.com/news/read/187752/multiple-genes-affect-risk-of-asthma-hay-fever-eczema-study.html>

Washington D.C. , Aug 5 : Researchers have found a total of 141 regions in our genetic material that largely explain the genetic risk underlying asthma, hay fever, and eczema.

According to the study published in the journal 'Human Molecular Genetics,' as many as 41 of the genes identified have not previously been linked to an elevated risk for these diseases.

The risk of developing asthma, hay fever or eczema is affected by genes, environment and lifestyle factors. Many patients diagnosed with one of these diseases also develop the other two at some stage in life.

Although previous studies have found many genes that exert an effect on these diseases, research has been unable to explain the whole genetic background to the origin of asthma, hay fever, and eczema.

In this study, which is the largest of its kind to date, researchers have analysed self-reported data from 350,000 participants in Britain's UK Biobank. Millions of gene positions were

tested for their effect on people's risk of being diagnosed with asthma, hay fever and/or eczema.

The 41 new genetic finds were also tested in an independent group of individuals comprising 110,000 clients of the American company '23andMe.' This testing verified that most of these new genetic variants have an effect on the individual's risk of developing the disease.

Every '23andMe' participant, or client, has paid personally to send in a saliva sample, used by the company to analyse the person's DNA. The participants then receive information about whether they carry various inherited genetic traits that may elevate their risk of a number of diseases.

The study showed that a large number of the genes identified entail a raised risk for all three diseases. This, in turn, shows that the elevated risk of suffering from allergy when asthma is diagnosed, or the elevated risk of asthma when an allergy is diagnosed, seems to be largely due to genetic factors. The study was also able to identify several genes that boost the risk of one of these diseases in relation to the others, which demonstrates that a number of more disease-specific effects also exist.

All three diseases arise through a complex association among several genes and also with environmental and lifestyle factors. To be able to improve the patients' everyday lives, it is important to develop drugs that are adapted to individual patients' genetic risks, and also to understand how our environment and lifestyle can prevent disease and improve symptoms of the disease.

"The results from this study are helping us to reach a greater understanding of why certain individuals are at higher risk of developing asthma and allergies, and we hope the results will be put to use both in clinical diagnostics and in drug development," said a researcher.

Heart Disease

Long-term declines in heart disease stalling in few countries (New Kerala:20190806)

<https://www.newkerala.com/news/read/187711/long-term-declines-in-heart-disease-stalling-in-few-countries.html>

Washington D.C., Aug 5 : Heart disease and stroke mortality rates have almost stopped declining in many high-income countries, found a study.

Researchers have analysed trends in cardiovascular disease mortality which consists of mainly heart disease and stroke - in 23 high-income countries since the year 2000.

They found cardiovascular disease mortality rates for people aged 35 to 74-years-old are now barely declining, or are increasing, in 12 of the 23 countries.

In the USA and for Canadian females, cardiovascular disease mortality rates have increased in the most recent year, while in Australia, the United Kingdom, and New Zealand annual declines in deaths from cardiovascular disease are now only 20 to 50 per cent of what they were in the 2000s.

One of the researchers of the study, Alan Lopez, said research suggested that obesity, or at least poor diet, may have been a significant contributor to the slowdown in the decline of cardiovascular disease deaths.

"Each of these countries has very high levels of obesity. In Australia, close to one-third of adults are obese. These increases in obesity levels mean that a significant portion of the population has been exposed to the cardiovascular disease risks associated with being overweight for several decades," Professor Lopez said.

However, obesity is only one of many risk factors for cardiovascular disease mortality, others include smoking, high blood pressure, high cholesterol, and diabetes.

Researchers found obesity levels are low in Italy and France where the slowdown in cardiovascular disease mortality in recent years is among the most notable of all countries.

University of Melbourne researcher and co-author Tim Adair said the research showed that the effect of successful public health interventions on cardiovascular disease mortality over the past 50 years is diminishing.

"In order to combat this, significant investment in preventive health measures is needed, particularly those aimed at increasing physical activity, improving diet and reducing obesity. Failure to address these issues could confirm the end of the long-term decline in cardiovascular disease deaths and threaten future gains in life expectancy," Dr. Adair concluded.

Diabetes

Whole body vibration reduces diabetic inflammation: Study (New Kerala:20190806)

<https://www.newkerala.com/news/read/187696/whole-body-vibration-reduces-diabetic-inflammation-study.html>

New York, Aug 5: Whole body vibration (WBV) can significantly improve how well our body uses glucose as an energy source and adjust our microbiome and immune cells to reduce diabetic inflammation, says a new study.

The study's findings, published in the International Journal of Molecular Sciences, showed how regular use of whole body vibration can create this healthier mix by yielding a greater percentage of macrophages -- cells that can both promote or prevent inflammation -- that suppress rather than promote.

The researchers, using a mouse model, showed that WBV alters the microbiome, a collection of microorganisms in our body, which help protect us from invaders and, in the gut, help us digest food.

They saw several changes including increased levels of a bacterium that makes short chain fatty acids, which can help the body better utilise glucose.

Glucose is used by the body for fuel but at high levels it promotes inflammation, insulin insensitivity and ultimately can cause diabetes.

"While there were other changes, the most dramatic they documented was the 17-fold increase in this bacterium called Alistipes, a gut bacterium not typically in high supply there but known to be proficient at making short chain fatty acids which, in turn, are "very good" at decreasing inflammation in the gut," said Jack Yu, chief of pediatric plastic surgery at Medical College of Georgia, Augusta University.

Alistipes, which helps ferment our food without producing alcohol, generally improves the metabolic status of our gut and makes us more proficient at using the glucose we consume for energy.

The researchers reiterated that while no one is certain just how WBV works, but it appears to help address a key concern in diabetes and many common diseases inflammation.

While acute inflammation helps us fight disease, chronic inflammation helps start and sustain a variety of diseases from cardiovascular problems to cancer as well as diabetes, the researchers said.

Mother and Child Health

Expectant mothers can reduce impact of marijuana on baby's brain development with choline (New Kerala:20190806)

<https://www.newkerala.com/news/read/187653/expectant-mothers-can-reduce-impact-of-marijuana-on-babys-brain-development-with-choline.html>

Washington D.C. , Aug 5 : Expectant mothers can reduce the impact of marijuana on foetal brain development with an essential micronutrient, choline, suggests a study.

The findings of the study, published in 'Psychological Medicine,' are critical because marijuana's use can negatively impact foetal brain development and early childhood behaviour.

"In the study, we found that maternal marijuana use begins to negatively impact the foetal brain at an earlier stage in pregnancy than we expected. However, we also found that eating choline-rich foods or taking choline as a supplement may protect the child from potential harm," said Camille Hoffman, University of Colorado School of Medicine.

Fifteen per cent of 201 mothers in the study used marijuana both before and beyond 10 weeks gestation. Infants of mothers who continued to use marijuana beyond 10 weeks had decreased cerebral nervous system inhibition at one month of age.

In addition, infants exposed to prenatal marijuana beyond 10 weeks gestation had lower "regulation" scores at three months of age. This can cause decreased reading readiness at age four, decreased conscientiousness and organisation as well as increased distractibility as far out as age 9. These adverse effects in the infant were not seen if women had higher gestational choline in the early second trimester.

Overall, results showed maternal choline levels correlated with the children's improved duration of attention, cuddliness, and bonding with parents.

"We already know that prenatal vitamins improve foetal and child development, but currently most prenatal vitamins do not include adequate amounts of the nutrient choline despite the overwhelming evidence of its benefits in protecting a baby's brain health. We hope that this research is a step towards more OB-GYNs, midwives and other prenatal care providers encouraging pregnant women to include choline in their prenatal supplement regimen," Hoffman added.

Dementia

Levels of haemoglobin associated with increased risk of dementia (New Kerala:20190806)

<https://www.newkerala.com/news/read/187494/levels-of-haemoglobin-associated-with-increased-risk-of-dementia.html>

Washington D.C. , Aug 5 : Both high and low levels of haemoglobin may be associated with the development of dementia years later, suggests a study.

The study was published in the journal 'Neurology'.

"The prevalence of dementia is expected to increase threefold over the next decades, with the largest increases predicted in the countries where the anaemia rate is the highest," said M. Arfan Ikram, study's author.

The study involved 12,305 people with an average age of 65 who did not have dementia. Participants' haemoglobin levels were measured at the start of the study. Overall, 745, or 6 per cent, of the participants had anaemia.

The participants were followed for an average of 12 years. During that time, 1,520 people developed dementia. Of those, 1,194 had Alzheimer's disease.

The researchers found that people with anaemia were 41 per cent more likely to develop Alzheimer's disease and 34 per cent more likely to develop any type of dementia than those who did not have anaemia. Of the 745 people with anaemia, 128 people developed dementia, compared to 1392 of the 11,560 people who did not have anaemia.

People with high levels of haemoglobin were also more likely to develop dementia. High levels can also be a sign of a health problem.

The study participants were divided into five groups based on their haemoglobin levels. Compared to the middle group, the group with the highest levels were 20 per cent more likely to develop dementia. Those in the lowest group were 29 per cent more likely to develop dementia than those in the middle group.

The results stayed the same after researchers adjusted for other factors that could affect the risk of dementia, such as smoking, high blood pressure, high cholesterol and alcohol use.

Ikram noted that the study does not prove that low or high haemoglobin levels are a factor in causing dementia; it only shows an association.

Autism

High levels of estrogen in the womb linked to autism (Science Daily:20190806)

<https://www.sciencedaily.com/releases/2019/07/190729094538.htm>

Scientists have identified a link between exposure to high levels of oestrogen sex hormones in the womb and the likelihood of developing autism. The findings are published today in the journal *Molecular Psychiatry*.

The discovery adds further evidence to support the prenatal sex steroid theory of autism first proposed 20 years ago.

In 2015, a team of scientists at the University of Cambridge and the State Serum Institute in Denmark measured the levels of four prenatal steroid hormones, including two known as androgens, in the amniotic fluid in the womb and discovered that they were higher in male fetuses who later developed autism. These androgens are produced in higher quantities in male than in female fetuses on average, so might also explain why autism occurs more often in boys. They are also known to masculinise parts of the brain, and to have effects on the number of connections between brain cells.

Today, the same scientists have built on their previous findings by testing the amniotic fluid samples from the same 98 individuals sampled from the Danish Biobank, which has collected amniotic samples from over 100,000 pregnancies, but this time looking at another set of prenatal sex steroid hormones called oestrogens. This is an important next step because some of the hormones previously studied are directly converted into oestrogens.

All four oestrogens were significantly elevated, on average, in the 98 fetuses who later developed autism, compared to the 177 fetuses who did not. High levels of prenatal oestrogens were even more predictive of likelihood of autism than were high levels of prenatal androgens (such as testosterone). Contrary to popular belief that associates oestrogens with feminisation, prenatal oestrogens have effects on brain growth and also masculinise the brain in many mammals.

Professor Simon Baron-Cohen, Director of the Autism Research Centre at the University of Cambridge, who led this study and who first proposed the prenatal sex steroid theory of autism, said: "This new finding supports the idea that increased prenatal sex steroid hormones are one of the potential causes for the condition. Genetics is well established as another, and these hormones likely interact with genetic factors to affect the developing foetal brain."

Alex Tsompanidis, a PhD student in Cambridge who worked on the study, said: "These elevated hormones could be coming from the mother, the baby or the placenta. Our next step should be to study all these possible sources and how they interact during pregnancy."

Dr Alexa Pohl, part of the Cambridge team, said: "This finding is exciting because the role of oestrogens in autism has hardly been studied, and we hope that we can learn more about how they contribute to foetal brain development in further experiments. We still need to see whether the same result holds true in autistic females."

However, the team cautioned that these findings cannot and should not be used to screen for autism. "We are interested in understanding autism, not preventing it," added Professor Baron-Cohen.

Dr Arieh Cohen, the biochemist on the team, based at the State Serum Institute in Copenhagen, said: "This is a terrific example of how a unique biobank set up 40 years ago is still reaping scientific fruit today in unimagined ways, through international collaboration."

The research was supported by the Autism Research Trust, the Medical Research Council, and Wellcome.