



DAILY NEWS BULLETIN

LEADING HEALTH, POPULATION AND FAMILY WELFARE STORIES OF THE DAY
Monday 20190513

मोटापा, डायबिटीज और हाई कोलेस्ट्रॉल

रोज सुबह पिएं 'भिंडी का पानी', दूर होंगे मोटापा, डायबिटीज और हाई कोलेस्ट्रॉल जैसे रोग (Dainik Jagran:20190513)

<https://www.onlymyhealth.com/lady-finger-or-okra-water-for-obesity-diabetes-and-cholesterol-in-hindi-1526375766>

आइये आपको बताते हैं भिंडी से बनने वाले एक ऐसी ड्रिंक के बारे में, जिसके सेवन से डायबिटीज, कोलेस्ट्रॉल और मोटापा जैसी कई समस्याएं आसानी से खत्म हो जाएंगी।

भिंडी को ही कुछ देशों में 'ओकरा' कहते हैं।

डायबिटीज के मरीजों के लिए भिंडी विशेष लाभकारी है।

भिंडी से बनने वाला ये 'ओकरा वाटर' कई गंभीर रोगों में फायदेमंद है।

आपने भिंडी की सब्जी जरूर खाई होगी, मगर क्या आपने भिंडी के पानी के बारे में सुना है? भिंडी का पानी शरीर के लिए बहुत फायदेमंद होता है। रोजाना सुबह उठने के बाद एक ग्लास भिंडी का पानी पीने से आप सैकड़ों रोगों से मुक्त रहते हैं। आयुर्वेद में भिंडी के पानी को कोलेस्ट्रॉल और हृदय रोगों से बचाव और डायबिटीज के लिए एक प्रमुख नुस्खा माना जाता है। दुनिया के कई देशों में वजन घटाने के लिए लोग भिंडी के पानी का सेवन करते हैं। अंग्रेजी में इसे 'ओकरा वाटर' के नाम से जाना जाता है।

भिंडी का पानी आप आसानी से घर पर बना सकते हैं। दुनिया के कई देशों में भिंडी में प्रोटीन, वसा, रेशा, कार्बोहाइड्रेट, कैल्शियम, फास्फोरस, आयरन, मैग्नीशियम, पोटैशियम, सोडियम और तांबा पाया जाता है। डायबिटीज रोगियों के लिए चिकित्सक भिंडी को बहुत फायदेमंद मानते हैं। भिंडी का पानी ग्लूकोज को ब्लड में घुलने की प्रक्रिया को धीमा करता है, जिससे आपके ब्लड में शुगर लेवल घटता है। आइए आपको बताते हैं कैसे बनाएं भिंडी का पानी और इससे आपको क्या फायदे मिलेंगे।

कैसे बनाएंगे 'भिंडी का पानी'

सबसे पहले 4-5 मीडियम साइज की भिंडी लें और उन्हें अच्छी तरह धुल लें।

इन भिंडियों को लंबाई में (ऊपर से नीचे की तरफ) बीच से काटकर दो भागों में बांट लें।

अब इन कटी हुई भिंडियों को एक जार में रख दें।

जार में 1 से 1.5 लीटर पानी डालें।

अब जार किसी झीने कपड़े या चलनी से ढक दें ताकि इसमें हवा जाती रहे।

इस पानी में भिंडियों को 8 से 24 घंटे तक रखा रहने दें।

तय समय के बाद भिंडियों को पानी में ही निचोड़कर बाहर निकाल लें ताकि उसका सारा अर्क निकल जाए।

अब भिंडी को फेंक दें और पानी को पी लें।

कैसे पिएं 'भिंडी का पानी'

भिंडी से बनने वाला ये 'ओकरा वाटर' कई गंभीर रोगों में फायदेमंद है। ये डायबिटीज को कंट्रोल करता है, शरीर का कोलेस्ट्रॉल कम करता है और किडनी रोगों से बचाव करता है। अगर आप नियमित इसका सेवन करते हैं, तो इससे वजन घटाने में भी मदद मिलती है और शरीर स्वस्थ रहता है। इस 'ओकरा वाटर' को सुबह खाली पेट पिएं और पीने के 30 मिनट बाद ही नाश्ता करें। सुबह पीने के लिए इसे शाम से ही भिगा दें ताकि कम से कम 8-10 घंटे भिंडी पानी में रहे और उसका अर्क ठीक से निकल सके।

क्यों फायदेमंद है भिंडी का पानी

भिंडी पौष्टिक तत्वों का भंडार है इसलिए इसके पानी से शरीर को कई तरह के स्वास्थ्य लाभ मिलते हैं। अगर आप एक ग्लास 'ओकरा वाटर' पीते हैं, तो इससे शरीर को इतने तत्व मिलते हैं।

80 माइक्रोग्राम फॉलेट

60 मिलीग्राम मैग्नीशियम

30 कैलोरीज

21 ग्राम विटामिन सी

6 ग्राम कार्बोहाइड्रेट

3 ग्राम डाइट्री फाइबर

2 ग्राम प्रोटीन

और सिर्फ 1 ग्राम फैट

थकान और सुस्ती भी रहेगी दूर

अगर आप इस 'ओकरा वाटर' का नियमित सेवन करते हैं, तो आपको कोई भी मल्टीविटामिन कैप्सूल या एनर्जी ड्रिंक लेने की जरूरत नहीं है क्योंकि इस वाटर में पहले ही इतने सारे तत्व मौजूद हैं, जो आपके शरीर को दिनभर ऊर्जा देते हैं और इससे थकान, सुस्ती और आलस खत्म होती है।

मिलेंगे ढेर सारे एंटीऑक्सिडेंट्स

भिंडी में ढेर सारे एंटीऑक्सिडेंट्स होते हैं जो डायबिटीज के अलावा दिल की बीमारियों से भी हमारी रक्षा करते हैं। भिंडी में मौजूद एंटीऑक्सिडेंट्स फ्री रेडिकल्स से होने वाले नुकसानों से हमें बचाता है और शरीर के अंदरूनी हिस्सों को स्वस्थ रखता है। इसके एंटीऑक्सिडेंट्स के कारण कैंसर सेल्स की विकास की गति भी धीमी होती है इसलिए ये कैंसर के मरीजों के लिए भी फायदेमंद है।

डायबिटीज में इंसुलिन के लिए भिंडी

भिंडी में कई ऐसे तत्व होते हैं जो इंसुलिन के उत्पादन में सहायक होते हैं। कार्बोहाइड्रेट से ग्लूकोज को अलग करने के लिए हमारे शरीर को एक हार्मोन की जरूरत पड़ती है जिसे इंसुलिन कहते हैं। ये शरीर में अग्नाशय द्वारा छोड़ा जाता है। हमारे शरीर में डायबिटीज इसी इंसुलिन की कमी के कारण होता है। भिंडी अग्नाशय में बीटा सेल्स को बेहतर बनाती है जिससे इंसुलिन का उत्पादन बढ़ता है।

बीमारियों के संक्रमण

खतरनाक बीमारियों का कारण बनती हैं घर की मक्खियां, इन 6 तरीकों से पाएं छुटकारा (Dainik Jagran:20190513)

<https://www.onlymyhealth.com/home-remedies-get-rid-flies-in-hindi-1499952286>

खतरनाक बीमारियों का कारण बनती हैं घर की मक्खियां, इन 6 तरीकों से पाएं छुटकारा

आज हम आपको ऐसे आसान विकल्प के बारे में बता रहे हैं जिनसे आप अपने घर से मक्खियों को आसानी से भगा सकते हैं।

आपके घर में मौजूद मक्खियां कहां-कहां से आती हैं इसकी जानकारी किसी को नहीं होती है। हालांकि ये बात जाहिर है कि मक्खियां किसी गंदी जगह से ही आती हैं। जब मक्खियां आपके घर में प्रवेश करती हैं तो तमाम तरह की संक्रामक बीमारियां भी लाती हैं। मक्खियां साफ-सुथरी जगह पर बैठकर वहां गंदगी फैला देती हैं। अगर आप स्वस्थ रहना चाहते हैं तो इन्हें घर से भगाना जरूरी है। आज हम आपको ऐसे आसान विकल्प के बारे में बता रहे हैं जिनसे आप अपने घर से मक्खियों को आसानी से भगा सकते हैं।

मक्खियों से होने वाली बीमारियां

टाइफाइड बुखार, पेचिश, हैजा, पोलियोमाइलाइटिस, एंथ्रेक्स, टुलारेमिया, कुष्ठ रोग और तपेदिक सहित मनुष्यों को होने वाली कम से कम 65 बीमारियों के संक्रमण की वजह घर की मक्खियां होती हैं। मक्खियां रोगों को संचारित करने में महत्वपूर्ण भूमिका निभाती हैं। गर्मी के मौसम में मक्खियों का प्रकोप मच्छरों की तरह ही बढ़ जाता है। ऐसे में मक्खियां भी रोगों का कारण बनती हैं। मक्खियों को घर से दूर रखने के लिए जरूरी है कि आप घर और आसपास स्वच्छता का विशेष ध्यान दें। इसके अलावा हम आपको कुछ ऐसी टिप्स बता रहे हैं जिसकी मदद से आप आसानी से मक्खियों को घर से दूर भगा सकेंगे।

मक्खियों से ऐसे पाएं छुटकारा

1- थोड़ा सा कपूर जलाएं और पूरे कमरे में इसका धुआं फैला दें। इसकी महक से मक्खियां घर में नहीं आएंगी।

- 2- घर में पुदीने के तेल का छिड़काव करें। इसकी महक से मक्खियां घर में नहीं आएंगी। होगी तो भाग जाएंगी।
- 3- घर में लैवेंडर के तेल का छिड़काव करें। इसकी महक से मक्खियां घर के अंदर नहीं आएंगी।
- 4- दालचीनी का घोल बनाकर छिड़काव से भी घर में मक्खियां प्रवेश नहीं कर पाएंगी। क्योंकि इसकी स्मेल बहुत तीक्ष्ण होती है।
- 5- इसके अलावा आप घर में लौंग के तेल का भी छिड़काव कर सकते हैं। ये भी मक्खियों के लिए काल हैं।
- 6- नीलगिरी का तेल भी मक्खियों को आसानी से भगाते हैं। जब ज्यादा मक्खी हों तो इस तेल का छिड़काव करें।

हाई बीपी

हाई बीपी को नियंत्रित रखते हैं गर्मी के मौसम में मिलने वाले ये 5 फ्रूट्स, रोजाना करें सेवन (Dainik Jagran:20190513)

<https://www.onlymyhealth.com/these-5-summer-fruits-which-help-you-treat-high-blood-pressure-in-hindi-1557487323>

गर्मियों का मौसम आपको विभिन्न प्रकार के फल प्रदान करता है जो पानी की मात्रा और स्वास्थ्य लाभ के साथ भरे होते हैं। गर्मियों के फल उच्च रक्तचाप को प्रबंधित करने में आपकी मदद कर सकते हैं।

काम का दबाव, तनाव, आदि कारकों के कारण उच्च रक्तचाप अब एक आम समस्या बन गई है। उच्च रक्तचाप या हाई ब्लड प्रेशर विभिन्न गंभीर स्वास्थ्य स्थितियों का एक सामान्य जोखिम कारक है। हाई ब्लड प्रेशर के इलाज के लिए दवाओं को पीना सबसे अच्छा उपाय नहीं है। सरल जीवन शैली में

परिवर्तन और नियंत्रित आहार आपके रक्तचाप के स्तर को नियंत्रित करने में आपकी मदद कर सकता है।

कीवी

कीवी एक स्वादिष्ट फल है जो पाचन में सुधार, प्रतिरक्षा को बढ़ा सकता है और त्वचा के स्वास्थ्य में सुधार कर सकता है। यह आपके रक्तचाप को भी प्रबंधित कर सकता है। कीवी एंटीऑक्सिडेंट से भरे होते हैं। अध्ययनों के अनुसार, अपने रक्तचाप को नियंत्रित करने के लिए आप दिन में तीन कीवी तक का सेवन कर सकते हैं। यह उच्च रक्तचाप, स्ट्रोक, दिल के दौरों आदि जैसे अन्य स्वास्थ्य खतरों को रोकने में भी मदद करेगा।

तरबूज

तरबूज स्वाद के साथ पोषक तत्वों से भरा हुआ है। आप गर्मियों में रोजाना सेवन कर सकते हैं। इसकी उच्च जल सामग्री आपको हाइड्रेटेड रखेगी जो गर्मियों के दौरान बहुत आवश्यक है। तरबूज आपको उच्च रक्तचाप को नियंत्रित करने में भी मदद कर सकता है क्योंकि इसमें पोटेशियम की मात्रा अधिक होती है। तरबूज एंटीऑक्सिडेंट और विटामिन सी से भी भरपूर होता है।

आम

गर्मियों का मौसम आम का मौसम है। ज्यादातर लोग आम के कारण गर्मियों के मौसम के लिए उत्साहित होते हैं। ग्रीष्मकाल में विभिन्न प्रकार के आम देखने को मिलते हैं। अब आपके पास आम खाने के और भी कारण हैं क्योंकि यह आपके रक्तचाप को नियंत्रित कर सकता है। आम पोटेशियम से भी भरपूर होते हैं जो इसे उच्च रक्तचाप का प्रबंधन करने के लिए एक आदर्श फल बनाता है। आप शेक, स्मूदी, डेसर्ट और कई अन्य तरीकों से आमों का आनंद ले सकते हैं।

स्ट्रॉबेरी

स्ट्रॉबेरी का रंग देखते ही एक खुशी की अनुभूति होती है। इसका स्वाद भी अच्छा होता है। आप एक स्ट्रॉबेरी शेक बना सकते हैं, इसे अपने सलाद में मिला सकते हैं, इसमें से सॉस बना सकते हैं या सीधे इसका सेवन कर सकते हैं। इसके स्वास्थ्य लाभ आपको स्ट्रॉबेरी का सेवन करने के लिए और अधिक प्रोत्साहित कर सकते हैं क्योंकि यह एंटीऑक्सिडेंट, विटामिन सी और ओमेगा 3 फैटी एसिड के साथ भरी हुई है। स्ट्रॉबेरी में पोटेशियम की उपस्थिति आपको उच्च रक्तचाप को नियंत्रित करने में मदद कर सकती है।

केला

अब तक आप समझ गए होंगे कि उच्च रक्तचाप को नियंत्रित करने में पोटेशियम एक महत्वपूर्ण भूमिका निभाता है और केला पोटेशियम का सबसे अच्छा स्रोत है। केला एक बहुत ही आम फल है जिसे आप कहीं भी बहुत ही उचित मूल्य पर पा सकते हैं। तो आपको बस केले खाने की ज़रूरत है और आप अपने उच्च रक्तचाप को नियंत्रित रख सकें।

उच्च रक्तचाप को नियंत्रित करने के अन्य तरीके

अपने आहार का ध्यान रखें।

कम से कम 30 मिनट व्यायाम जरूर करें।

तनाव मुक्त रहें

आक्रामकता से लड़ने के लिए मेडिटेशन करें।

नमक का सेवन कम करें।

धूम्रपान छोड़ दें।

जितना हो सके कैफीन से बचें।

गर्भावस्था

अधिक उम्र में पिता बनना जच्चा-बच्चा के लिए हो सकता है नुकसानदेह (Dainik Jagran:20190513)

<https://www.jagran.com/world/america-being-a-father-at-a-higher-age-is-harmful-for-the-child-19216727.html>

शोधकर्ताओं का कहना है कि 45 साल की उम्र के बाद व्यक्ति के पिता बनने की क्षमता कम हो जाती है। ऐसे में गर्भावस्था के दौरान कई तरह की दिक्कतें आ सकती हैं।

वाशिंगटन, प्रेट्र। लोगों में ऐसी धारणा बनी हुई है कि पुरुष यदि 40-50 साल के बाद भी पिता बनते हैं तो इसका उनके बच्चों पर कोई विपरीत असर नहीं पड़ता है। हालांकि अमेरिका की रटगर्स यूनिवर्सिटी के शोधकर्ताओं ने इसे गलत साबित कर दिया है। बीते चालीस साल में हुए अध्ययनों का विश्लेषण करने के बाद उन्होंने पाया कि अधिक उम्र में पिता बनना जच्चा-बच्चा दोनों के स्वास्थ्य के लिए नुकसानदायक साबित हो सकता है।

शोधकर्ताओं का कहना है कि 45 साल की उम्र के बाद व्यक्ति के पिता बनने की क्षमता कम हो जाती है। ऐसे में गर्भावस्था के दौरान कई तरह की दिक्कतें आ सकती हैं। समयपूर्व प्रसव के साथ ही जन्म के समय बच्चे की मौत होने या उसका वजन बहुत कम होने का खतरा भी बढ़ जाता है। ऐसे बच्चों में सिजोफ्रेनिया जैसे मनोरोग के साथ ही ऑटिज्म से पीड़ित होने का खतरा भी बढ़ जाता है।

यूनिवर्सिटी की प्रोफेसर ग्लोरिया बकमैन ने कहा, 'जिस तरह उम्र बढ़ने पर व्यक्ति की मांसपेशियां कमजोर होती जाती हैं उसी तरह उनका शुक्राणु भी कमजोर हो जाता है। ऐसे में उनसे पैदा हुए बच्चों में कई तरह की बीमारियों का खतरा बढ़ जाता है।' उन्होंने यह भी कहा कि आमतौर पर महिलाएं अपनी प्रजनन क्षमता को लेकर काफी सजग रहती हैं जबकि पुरुष इसे नजरअंदाज करते हैं। ऐसे में जरूरी है कि उन्हें भी अधिक उम्र में पिता बनने के दुष्प्रभावों से अवगत कराया जाए।

किडनी और थायरॉयड

होम्योपैथी में है किडनी और थायरॉयड का बेस्ट ट्रीटमेंट, एक्सपर्ट से जानें कैसे (Dainik Jagran:20190513)

https://www.herzindagi.com/hindi/health/homeopathy-is-the-best-treatment-for-kidney-and-thyroid-problem-says-expert-article-103600?utm_source=Jagran&utm_medium=Referral&utm_campaign=Jagran_HZ_Specials

अगर आप किडनी या थायरॉयड से परेशान हैं तो इन दोनों बीमारियों को दूर भागने का सबसे अच्छा ट्रीटमेंट होम्योपैथी है, आइए एक्सपर्ट से जानें कैसे।

बदलते लाइफस्टाइल और गलत खान-पान के चलते गंभीर बीमारियों बहुत ही आम हो गई है। इन्हीं बीमारियों में से बहुत ही आम होने वाली बीमारियां किडनी और थायरॉयड की हैं। जी हां यह दोनों की

बीमारियां बढ़ती उम्र के लोगों को ही नहीं बल्कि कम उम्र के लोगों को भी अपना शिकार बना रही हैं और समय रहते इसका इलाज ना नहीं किया गया तो ये कई गंभीर बीमारियां का कारण बन सकती हैं। इससे बचने के लिए लोग तरह-तरह की दवाओं की खोज करते हैं। अगर आप भी ऐसी ही किसी बीमारी से परेशान हैं और इसके लिए सबसे बेस्ट मेडिकल ट्रीटमेंट की खोज कर रहे हैं तो हम आपको बात दें कि किडनी और थायरॉयड संबंधी बीमारियों को दूर करने के लिए होम्योपैथी ट्रीटमेंट बेहद फायदेमंद है। यह बात हम नहीं कह रहे बल्कि यह बात एक अध्ययन की हालिया रिपोर्ट में साबित हुई है। अध्ययन पद्मश्री डॉक्टर कल्याण बनर्जी की अगुवाई में उनके दिल्ली स्थित क्लीनिक में किया गया था।

किडनी रोगों के लिए होम्योपैथी चिकित्सा है बेस्ट

डॉक्टर बनर्जी ने कहा कि किडनी की खराबी की जानकारी शुरुआत में होने और होम्योपैथी चिकित्सा पद्धति से मरीजों का इलाज समय से शुरू होने से 50 फीसदी मरीजों का सफल इलाज हो सकता है और किडनी संबंधी तकलीफ से उनको निजात मिल सकती है। अध्ययन की रिपोर्ट के अनुसार, किडनी की खराबी के गंभीर रोग का इलाज आरंभ होने के बाद तीसरी बार क्लीनिक आने वाले किडनी के 50-58.3 प्रतिशत मरीजों में उनके सीरम यूरिया और क्रिएटिनिन के लेवल में सुधार पाया गया।

होम्योपैथी से थायरॉयड में भी आता है सुधार

वहीं, हाइपोथायरायडिज्म पर किए गए अध्ययन में पाया गया कि इलाज आरंभ होने के बाद चौथी बार क्लीनिक आने वाले 35 प्रतिशत रोगियों में उनके सीरम थायरॉयड उत्तेजक हार्मोन की रीडिंग में सुधार देखा गया। हाइपोथायरायडिज्म पर यह अध्ययन 2011-2015 के दौरान क्लीनिक में आए 2,083 मरीजों के रिकॉर्ड के आधार पर किया गया है। वहीं, किडनी संबंधी रोग पर अध्ययन 2018 और 2019 में एक महीने के अंतराल पर क्लीनिक आए किडनी खराब होने की गंभीर बीमारी से ग्रस्त 61 मरीजों के रिकॉर्ड के आधार पर किया गया है।

स्ट्रेस और अनहेल्दी खाने से कमजोर हो सकती है इम्यूनिटी, बचने के ...

डॉक्टर की राय

डॉक्टर कल्याण बनर्जी क्लीनिक के फाउंडर डॉक्टर कल्याण बनर्जी ने कहा, 'इस अध्ययन के शुरुआती अवलोकन काफी दिलचस्प हैं। हाइपोथायरायडिज्म पर अध्ययन के आंकड़ों से संकेत मिला है कि रोगियों को दी जाने वाली विशिष्ट होम्योपैथिक दवाएं थायरॉयड ग्लैंड के काम में सुधार के लिए असरदार हैं, जिससे थायरॉयड उत्तेजक हार्मोन रीडिंग में कमी आई। यह हाइपोथायरायडिज्म के

प्राकृतिक इतिहास की समझ के विपरीत है, जो बताता है कि इस बीमारी के बढ़ने को आमतौर पर कंट्रोल नहीं किया जा सकता है। हाइपोथायरायडिज्म के एक तिहाई से अधिक मरीजों को होम्योपैथिक दवाओं से फायदा हो रहा है। भारत की 11 फीसदी आबादी हाइपोथायरायडिज्म से पीड़ित है, जिसके लिए होम्योपैथी इलाज असरदार हो सकती है।'

डॉक्टर कल्याण बनर्जी ने कहा, 'वर्तमान में उपलब्ध कोई भी उपचार सीरम यूरिया और क्रिएटिनिन रीडिंग में कमी करने में सक्षम नहीं है, जबकि हमारे अध्ययन की रीडिंग से यह निर्णय लेने में मदद मिलेगी कि डायलिसिस शुरू की जानी चाहिए या नहीं।'

होम्योपैथिक ट्रीटमेंट से दोनों बीमारियों में होता है फायदा

डॉक्टर कल्याण बनर्जी क्लीनिक के डॉक्टर कुशल बनर्जी ने कहा, 'हमारा उद्देश्य यह पुष्टि करने का प्रयास करना था कि होम्योपैथिक ट्रीटमेंट से किडनी संबंधी गंभीर रोग और हाइपोथायरायडिज्म पीड़ित मरीजों को फायदा होता है। इन दोनों अध्ययनों के बाद, हम आशा करते हैं कि इन पर और भी अनुसंधान किए जाएंगे। हम अपने निष्कर्षों को प्रकाशित करने और अपने उपचार प्रक्रिया को सार्वजनिक करने के लिए हर संभव प्रयास करेंगे ताकि दुनिया भर के रोगियों को फायदा मिल सके।'

डॉक्टर कुशल बनर्जी ने कहा कि किडनी की खराबी के बारे में मरीजों को पहले पता नहीं चल पाता है क्योंकि 50 प्रतिशत तक किडनी की खराबी के बारे में ब्लड की रिपोर्ट में सही जानकारी ही नहीं मिल पाती है।

Women Health

Sensitivity for menstruating girls missing (The Tribune:20190513)

<https://www.tribuneindia.com/news/comment/sensitivity-for-menstruating-girls-missing/772131.html>

In our country, where secrecy and silence about the subject of menstruation is the norm, it becomes all the more imperative that educational institutions be menstruation-friendly spaces where girls are comfortable.

Needed: Women-friendly campuses, with sensitive staff, girls' rest rooms as also safe and hygienic disposal facilities for sanitary napkins.

Probably one of the most demeaning and insensitive incidents in an educational institution in recent times is the stripping of girl students after the discovery of a sanitary napkin in the toilet on the campus. One such incident was reported at a government school in Fazilka in November 2018 and the more recent one in a private university in Bathinda last month.

The issue in the second case was that a girl had dumped a used sanitary napkin in the washroom. During the search to find out which of the girls was menstruating, the students were stripped with the help of lady security guards. Action against the wardens and others was taken by the authorities only when about 600 students protested and demanded action. Subsequently, the action that followed was the termination of the services of teachers and security guards concerned.

In the previous incident, where 15 girls of Class VII were stripped by female teachers to find out who was wearing a sanitary pad, the two teachers involved were transferred.

The fact that these incidents have taken place in educational institutions having educated teachers and administrators is extremely disheartening. How gender-insensitive women teachers can be towards the menstrual cycle, a natural process linked with a woman's body and the cultural practices still being followed by a large part of our society and families. Despite the change in societal norms and cultural practices brought about by education, there has not been any significant change in the people's attitude towards menstruation.

The 2015-16 National Family Health Survey (NFHS) found that only 57.6 per cent women/girls in India are currently using sanitary napkins: of the rural women, only 48.5 per cent, and of the urban, 77.3 per cent.

During a survey of sanitary napkin usage in government schools in rural Haryana, it was found that more than 70 per cent of the girls do not have access to napkins. All kinds of unhygienic practices, including old cloth which is washed and recycled, are followed. The NFHS 2015-16 further revealed that 62 per cent of the Indian girls/women in the age group of 15 to 24 use cloth as protection when they menstruate. It also found that a majority of the girls used the same cloth for the entire day since there is no facility available, coupled with the shame associated with menses.

Such poor menstrual hygiene not only affects physical health, giving rise to infections, but also social and mental well-being of a girl. Repeated infections in young girls lead to severe reproductive tract infections in later age. According to a UNICEF study, old rags, husks, dried leaves, grass or newspapers are also used. This study mentions that 41 per cent of adolescents hide their cloth in their room, 22 per cent on the roof and 11 per cent share the cloth with others.

These practices have resulted in a culture of silence around the subject with mothers not discussing the issue with their young daughters.

Adolescence is a period of great change in a child's life, which includes physical, psychological, emotional and sexual changes. Puberty, resulting from hormonal changes, requires sensitive handling and understanding from the family members as well as the educational institution.

A majority of our students in small towns and villages are possibly first-generation or second-generation literates. And the traditional understanding that women's bodies are impure during the time of menstruation is deeply rooted in their psyche. Entering the kitchen or a place of worship is considered taboo. There are even beliefs that if a menstruating woman touches a pickle jar, it would get spoiled!

In such a scenario where secrecy and silence about the subject is the norm, it becomes all the more imperative that educational institutions be menstruation-friendly spaces where girls are comfortable. The behaviour of the teachers and wardens of the school and the university speaks volumes about our education system. Their attitude and conduct reflects upon what they have learnt about educational psychology and how young minds need to be handled. Whether such persons are really fit to be teachers is a big question mark. Does this act by the teachers not amount to sexual harassment and should be covered under the Sexual Harassment of Women at Workplace Act 2013 or the Protection of Children from Sexual Offences (POCSO) Act 2012?

One can imagine the significant psychological effect that this incident would have had on the young girls, including suffering from shame and low self-esteem. It is also the duty of the managers of educational institutions to ensure that the campuses not only have women-friendly rest rooms but also safe and hygienic disposal facilities for sanitary napkins.

As is seen across India in rural and semi-rural educational institutions, there is a heavy dropout rate of girls once they attain puberty. A survey has revealed that 30 per cent of the girls drop out of school after they start menstruating. This kind of cultural neglect of menstrual hygiene is reflected in policies as well because a large number of adolescent girls (between 12 and 18 years) miss five days of school each month because of lack of toilets for girls.

The absence of adolescent sex education and healthy menstrual practices and lack of access to low-cost sanitary napkins and their disposal leads to severe health implications in later life. Having a well-defined policy on the subject should be as much a priority with the policy planners as vaccination and inoculation in children. Each violent incident in recent times in schools and colleges reminds us how the system is failing to ensure the mental well-being of the staff and students. There is a dire need for sensitivity and empathy-building for the staff and faculty of educational institutions.

Air Pollution

Delhi: Air quality touches very poor, likely to be severe today (The Indian Express:20190513)

<https://indianexpress.com/article/cities/delhi/delhi-air-quality-touches-very-poor-likely-to-be-severe-today-5724277/>

The air quality in Delhi and most NCR towns was 'very poor' as the concentration of particulate matter in the air increased.

Air quality still severe, three-day construction ban in Delhi-NCR

Death By Breath: Delhi government fined Rs 25 crore over pollution

Delhi: Thick haze engulfs city, CPCB says action by agencies 'inadequate'

The air quality forecast says Monday will be worse, with air quality in the 'severe' category.

The impact of a long-distance dust storm, localised air pressure systems picking up dust and the westerly direction of surface winds left the city gasping for fresh air Sunday.

The air quality in Delhi and most NCR towns was 'very poor' as the concentration of particulate matter in the air increased. The air quality forecast says Monday will be worse, with air quality in the 'severe' category.

India Meteorological Department (IMD) officials said the lack of rain in Rajasthan, Himachal Pradesh, Punjab and Delhi has led to dust accumulating in these parts. "Without rain, the possibility of formation and accumulation of dust increases. With the prevailing wind system, where wind is flowing from the dry western parts of the country and a western disturbance over the hills in Himachal Pradesh and Jammu and Kashmir is active, you get dust storm-like conditions," said an IMD official.

As per the Central Pollution Control Board's air quality index, the city's air was in the 'very poor' range with an AQI value of 334. In Gurgaon, the AQI was 372 while in Ghaziabad it was 382. The primary pollutants were PM 10 and PM 2.5. IMD officials said the impact of PM 10 was more than that of PM 2.5, which points more to the presence of dust particles.

At the Delhi Pollution Control Committee's Jawaharlal Nehru Stadium station, for example, the concentration of PM 10 at 8 am was 2,290 micrograms per cubic metres, almost 23 times the standard of 100 micrograms per cubic metres. The concentration of PM 2.5 was 254 micrograms per cubic metres against the standard of 60 micrograms per cubic metres. As winds picked up, the concentration gradually decreased.

With a dust storm expected Monday, the air is expected to get poorer. However, IMD has forecast light rain on Tuesday, which will bring down pollution levels.

Healthcare

Delhi: East Delhi hopes hospital promises become a reality (The Indian Express:20190513)

<https://indianexpress.com/elections/delhi-elections-2019-east-delhi-hopes-hospital-promises-become-a-reality-5724318/>

All parties have touched on better healthcare facilities but words ring hollow, say residents.

Voter queued up at a poll booth in Trilokpuri in East Delhi. (Express photo by Prem Nath Pandey)

In East Delhi, where all three candidates have promised new hospitals in their manifestos, voters Sunday said they have little hope that the poll outcome will change the state of healthcare in the constituency.

This is the only constituency where there is not a single MCD-run hospital, and where there are two Delhi government hospitals — Lal Bahadur Shastri Hospital and Dr Hedgewar Aarogya Sansthan.

The shortage was raised by AAP's Atishi, who linked it in her manifesto to full statehood, promising three new Delhi government hospitals in the constituency. BJP's Gautam Gambhir has promised to set up a central government hospital on par with Safdarjung Hospital within two years of being elected, while Congress's Arvinder Lovely also promised new hospitals along with facilities like free diagnoses for senior citizens.

“Who knows what to expect? What did (incumbent MP) Maheish Girri do in the last five years? Did we even see his face?” said Abdul Alam, a resident of Trilokpuri.

Four months ago, Alam lost his father when he could not be rushed to Lal Bahadur Shastri Hospital, 15 minutes away from home, in time during a severe asthma attack.

Residents also spoke of overcrowding in hospitals. “I went for a check-up during my first pregnancy, and had to spend the entire day in a line. I never went back and have been going to private hospitals ever since,” said Sonia Verma (32), a resident of Mandawali, whose two children are 12 and 8. Asked if better public healthcare was a consideration while choosing who to vote for, she said, “Ummeed hai ki Modi ji isme bhi bhala hi karenge.”

Mandawali also lacks a mohalla clinic — the one which had been set up was removed after a year of operating.

Polling agent arrested for influencing voters inside Faridabad booth: EC

First challenge for next govt: Food inflation set to return

How timely interventions from Bumrah did the trick for Mumbai Indians

Vandana, a third-year undergraduate student at Delhi University's School of Open Learning, said a trip to the neighbourhood dispensary can be a tedious affair. "To just get medicines against a prescription, sometimes you have to spend the entire day in line at the dispensary, there is so much crowding. It is the only dispensary in the vicinity, so it is choked."

But like most voters The Indian Express spoke to, Vandana believes the most crucial healthcare initiative required here is a new, large government hospital to reduce crowding at current ones. "If not a new hospital, facilities and area of Lal Bahadur Shastri Hospital need to be expanded so people have a hospital where they can go to without being referred elsewhere. People here keep running to Lok Nayak Hospital in Delhi Gate because it has better facilities," said Manoj Ojha (64), resident of Trilokpuri.

Asked if he believes his vote is a step towards changing that, he said: "Kuch nahi hone wala hai. All (parties) are as bad as the other in these respects — they'll just blame each other for everything."

At West Vinod Nagar, Biren Sahu (30), who works as an assistant at a diagnostic lab, reiterated that there is a dire need for better healthcare in the area. "I deal with patients from poor families on a daily basis and I know the travails they go through. While people may not vote purely on that ground, whoever wins should work on it."

<http://onlinepaper.asianage.com/articledetailpage.aspx?id=12988126>

Study: Broccoli can fight schizophrenia

Washington: A chemical derived from broccoli sprouts can be used to manage schizophrenia symptoms, scientists have found, paving the way for treatments that reduces unwanted side effects of traditional medicines.



Scientists from Johns Hopkins University in the US characterised a set of chemical imbalances in the brains of people with schizophrenia related to the chemical glutamate.

Supplementing with broccoli sprout extract, which contains high levels of the chemical sulphoraphane, may someday provide a way to tweak the level of chemical glutamate.

Sulphoraphane is found in a variety of cruciferous vegetables, and was first identified as a

“chemoprotective” substance decades ago, researchers said.

“It’s possible that future studies could show sulphoraphane to be a safe supplement to give people at risk of developing schizophrenia as a way to prevent, delay or blunt the onset of symptoms,” said Akira Sawa, a professor at the Johns Hopkins University.

Schizophrenia is marked by hallucinations, delusions and disordered thinking, feeling and behaviour. — *PTI*

Obesity

Do we have the wrong idea about the global obesity 'epidemic?' (Medical News Today:20190513)

<https://www.medicalnewstoday.com/articles/325153.php>

Previous research has suggested that urbanization is a primary factor in the rise in obesity around the world. However, a new large-scale study contradicts this, indicating that the increase in obesity rates is more significant among people in rural areas.

A study looking at global weight gain trends across the globe found that urban areas are not in the lead.

Past studies have suggested that, at a global level, urbanization is a key contributor to the soaring rates of obesity.

Researchers have explained this pattern by hypothesizing that people living in urban areas eat more unhealthful, highly processed foods and live less physically active lifestyles.

However, a major new study — the results of which appear in the journal *Nature* — now turns this idea on its head by showing that obesity rates across the world have grown more rapidly in rural areas than in urban areas.

In the study, researchers from the Imperial College London in the United Kingdom led a global team of more than 1,000 specialists. Together, they analyzed the health data of more than 112 million adults from 200 countries and territories, covering a period of 32 years from 1985 to 2017.

The team sourced these data from 2,009 population-based studies that made their participants' height and weight measurements available. From these two values, it is possible to calculate a person's body mass index (BMI), which allows healthcare professionals to determine whether or not the individual has obesity.

To make sure that their final results were as reliable and unbiased as possible, the researchers excluded data that participants had self-reported.

'Commonly held perceptions overturned'

The investigators' extensive analysis revealed that women's BMI increased by an average of 2.0 kilograms per square meter (kg/m²) over the study period, while men's BMI rose by 2.2 kg/m² on average.

However, the increases in BMI were most prominent not in urban areas but in rural ones, according to the researchers. They note that rural areas in low- and middle-income countries actually accounted for more than 80% of the BMI increase.

Nature vs. nurture: What fuels obesity, diabetes?

New research explains how lifestyle can affect a person's genetic makeup, influencing their risk of metabolic diseases.

The team explains that the situation has changed since 1985 when in most countries, people living in urban areas had higher rates of obesity than those in rural areas.

Between 1985 and 2017, the average BMI in rural regions worldwide rose by 2.1 kg/m² for adults of both sexes, whereas in urban areas, the average BMI of women and men increased by 1.3 kg/m² and 1.6 kg/m² respectively.

"The results of this massive global study overturn commonly held perceptions that more people living in cities is the main cause of the global rise in obesity."

Senior author Prof. Majid Ezzati, Imperial College London

At the same time, the researchers note that the income of a country plays a role in the average BMI increase of its population. In high-income countries, BMIs have grown the most in rural areas, especially in the case of women.

The authors believe that this might be because rural populations in high-income countries typically enjoy fewer benefits than their urban counterparts, having lower incomes, more restricted access to education, and less access to healthful foods due to high costs.

"Discussions around public health tend to focus more on the negative aspects of living in cities," notes Prof. Ezzati. "In fact, cities provide a wealth of opportunities for better nutrition, more physical exercise and recreation, and overall improved health."

"These things are often harder to find in rural areas," he emphasizes.

Rural populations face different challenges

Rural communities in low- and middle-income countries have grown economically compared with the 1980s. The authors note that the benefits that this has afforded them — such as more modern agricultural tools and access to better infrastructure and means of transport — may actually have had a negative effect on health by decreasing people's levels of physical activity and introducing more unhealthful foods.

"As countries increase in wealth, the challenge for rural populations changes from affording enough to eat to affording good-quality food," Prof. Ezzati emphasizes.

The only countries where this pattern did not seem to apply were those of sub-Saharan Africa, where women from urban areas had higher BMI growth rates than women from rural regions.

This finding, the researchers say, could be because the women living in the cities tend to do less physically active work — desk work, for instance — and do not engage in the same physically demanding tasks as their counterparts in rural areas.

All in all, however, the current findings indicate that researchers and policy-makers may need to reassess their understanding of the factors that drive unhealthful weight gain across the world and consider new ways of tailoring approaches to health in different urban and rural communities.

"This means that we need to rethink how we tackle this global health problem," says the senior author.

Depression

Depression: Exercise may reduce symptoms but not in women (Medical News Today:20190513)

<https://www.medicalnewstoday.com/articles/325142.php>

Many experts consider exercise to be an effective treatment for depression. However, new research casts doubt on this theory by showing that not everyone may benefit.

A new study looks at whether exercise can relieve depressive symptoms in men and women equally.

Depression is the number one cause of disability across the globe, according to the World Health Organization (WHO).

If the condition is severe and long-lasting, it can have a hugely detrimental effect on every part of a person's life.

Effective treatment does exist, but research has shown that more than one in two people with depression do not receive it.

Possible reasons for this include misdiagnosis, the perceived stigma around mental health, and a lack of access to resources.

Doctors often prescribe antidepressant medication, but experts believe that a simpler and more readily available treatment can help. Exercise can be just as effective as antidepressants, note Harvard Medical School, although they acknowledge that medication may also be necessary in severe cases.

However, a new study by researchers at the University of Michigan in Ann Arbor has found that the effect of exercise on depression differs for men and women. The scientists studied the exercise and sleep patterns of more than 1,100 people studying at Beijing University in China.

Experts already know that disturbed sleep is a feature of depression and that exercise is a potential treatment for this mental health condition. In the new study, the researchers asked the participants to complete three questionnaires, which asked them about their sleep, exercise, and depressive symptoms.

Man versus woman

The researchers expected to find a link between exercise and depression, but this connection only revealed itself in male participants. Moderate or vigorous exercise had a positive effect on men who exhibited symptoms of depression.

Women with depressive symptoms, on the other hand, did not benefit from any level of exercise.

Principal investigator Weiyun Chen believes that the fact that few of the women in the study participated in high-intensity exercise may explain this finding. However, this contradicts previous research.

Exercise for mental health: How much is too much?

A recent study concludes that too much exercise may negatively affect mental health.

Earlier studies pegged exercise of low-to-moderate intensity as a potential long-term treatment for depression. Vigorous physical activity releases endorphins, but regular levels of exercise can result in the growth of nerve cells.

"In people who are depressed, neuroscientists have noticed that the hippocampus in the brain — the region that helps regulate mood — is smaller," Dr. Michael Craig Miller, assistant professor of psychiatry at Harvard Medical School, explained in 2013. "Exercise supports nerve cell growth in the hippocampus, improving nerve cell connections, which helps relieve depression."

Casting doubt on exercise

The latest study, which the researchers published in the *Journal of American College Health*, suggests that neither low- nor high-intensity exercise benefits women with depression.

This finding could be vital because depression is more prevalent in women than in men. In the study, 43% of female participants reported depressive symptoms compared with 37% of male participants.

Both sexes did exhibit some similarities. For example, poor sleep correlated with the level of depression in both men and women.

The study authors were surprised to find that the majority of the participants did not report feeling depressed. Close to one in seven college students receive a diagnosis of depression, partly because their environment tends to lead to stress and a lack of sleep.

Making research more equal

The fact that more women report depression could help explain the relationship between depression, exercise, and sleep. People with more severe symptoms of depression may be less motivated to exercise and more likely to experience disturbed sleep. As the study showed, these individuals were more likely to be female.

Researchers must do much more work to strengthen these findings. Future studies will need to include people from numerous locations around the world to see whether the results are applicable globally. They will also need to recruit and evaluate people from different age ranges.

Gender differences also mean that research into depression may need to prioritize women, which some people have accused it of failing to do in the past.

Cancer

Diabetes linked to different forms of cancer in males vs. females (Medical News Today:20190513)

<https://www.medicalnewstoday.com/articles/325149.php>

Previous research has suggested a link between the presence of diabetes and a person's risk of cancer. Now, a large study in a Chinese population shows that type 2 diabetes is associated with an increased risk of cancer — though females and males seem to be more at risk of different forms.

Males and females with type 2 diabetes are more at risk of different forms of cancer.

Earlier this week, Medical News Today reported on a study showing that people who have cancer and diabetes may have an increased risk that their malignant tumors will spread.

The study, which explains the likely biological mechanism underlying this risk, was spurred by other research suggesting a link between diabetes and cancer.

Now, investigators — many from the Shanghai Jiao Tong University School of Medicine, in China — have published the results of an analysis conducted using the medical data of a large

Chinese cohort. The research paper, the first author of which is Jiying Qi, appears in the *Journal of Diabetes*.

The researchers also note that their country has a very high prevalence of both diabetes and prediabetes, as reports have shown.

The team identified 410,191 adults — aged between 20 and 99 — who had a diagnosis of type 2 diabetes between July 2013 and December 2016. At that time, none of these people had cancer.

Qi and colleagues followed the medical records of these individuals through to December 2017, to see which people developed cancer and what form of cancer their doctors diagnosed.

Significantly higher risk of cancer

By the end of 2017, the researchers had identified 8,485 cases of cancer among the initial cohort, and the investigators soon realized that males with type 2 diabetes and females with the same condition had a higher risk of distinct types of cancer.

The researchers found that, among people with type 2 diabetes, males had a 34% higher risk of cancer than their healthy peers, and females had a 62% percent higher risk. Males with type 2 diabetes were more at risk of as many as 11 different forms of cancer, while females were more at risk of 13 different forms.

More specifically, males with type 2 diabetes had an 86% increase in the risk of prostate cancer, compared with their healthy counterparts.

They also had a significant risk of leukemia, skin cancer, thyroid cancer, lymphoma, kidney cancer, liver cancer, pancreatic cancer, lung cancer, colorectal cancer, and stomach cancer.

However, males with the metabolic condition appeared to have a lower risk of developing esophageal cancer.

Type 2 diabetes: Simple method can help tailor treatment

Is there an easy way to find out which diabetes treatment best suits an individual?

As for females with type 2 diabetes, they were most at risk of nasopharyngeal cancer, of which they had more than a twofold risk.

They also had a high risk of developing cancer of the liver, esophagus, thyroid, lungs, and pancreas, as well as lymphoma, uterine cancer, colorectal cancer, leukemia, breast cancer, cervical cancer, and stomach cancer.

Females with type 2 diabetes, however, had a significantly lower risk of developing gallbladder cancer.

"The Shanghai Hospital Link Center has collected clinical information from the main general and specialized hospitals and created a centralized data repository for all residents in Shanghai since 2013," co-author Bin Cui explains, regarding the data used in the study.

"Based on this database, our research could be carried out smoothly and efficiently," he notes.

Following their current findings, the research team advises that relevant organizations should come up with better preventive strategies for cancer among people with type 2 diabetes.

Inflammatory bowel disease

IBD: Blood test could help predict severity, improve treatment (Medical News Today:20190513)

<https://www.medicalnewstoday.com/articles/325137.php>

Researchers have developed a new test that can predict the severity of inflammatory bowel disease. The test will help allow for more personalized treatment plans in the future.

A new test might soon help doctors predict the course of IBD.

Inflammatory bowel disease (IBD) is the term that doctors use to describe chronic inflammation of the gastrointestinal tract.

According to the Centers for Disease Control and Prevention (CDC), 1.3% of adults in the United States have IBD.

Types of IBD include Crohn's disease, which involves the lining of the digestive tract, and ulcerative colitis, which affects the lining of the large intestine and rectum.

The symptoms of Crohn's disease and ulcerative colitis may vary, depending on the severity of inflammation, but they usually involve diarrhea, abdominal pain, fatigue, and weight loss.

Various medicines can treat the symptoms of IBD and stop its reoccurrence, but there is currently no cure. The more severe the inflammation is, the more powerful the drugs need to be, and some of these medications can have unpleasant side effects.

For this reason, researchers are keen to find ways to predict how the course of the disease will progress to guide the treatment options. To date, however, this has not been possible.

Developing a new prognostic test

Previously, researchers in Cambridge in the United Kingdom demonstrated the potential to use a genetic signature in CD8 T cells — a type of immune cell — to predict the severity of IBD. However, a test was not practical because isolating CD8 T cells and identifying the signature was complex.

Following on from this, scientists at the U.K.'s University of Cambridge focused on developing a test — using the CD8 T cell signature — but with readily available technology.

The researchers, who have published their findings in the journal *Gut*, used a mix of machine learning and a whole-blood assay called quantitative polymerase chain reaction (qPCR).

By using qPCR, which is a commonplace tool in many healthcare and research labs, they could identify genetic signatures and ascertain whether someone's IBD would be mild or severe.

IBD: New approach to symptom relief looks promising

A recent study suggests that blocking a protein involved in blood clotting might improve treatment.

Once the test was ready, the scientists confirmed their findings in more than 120 people with IBD from across the U.K.

Dr. James Lee, who is the joint first author of the study, explains how straightforward the process could prove.

"Using simple technology that is available in almost every hospital, our test looks for a biomarker — essentially, a medical signature — to identify which patients are likely to have mild IBD and which ones will have more serious illness."

Continuing, Dr. Lee says: "If an individual is likely to have only mild disease, they don't want to be taking strong drugs with unpleasant side-effects. But, similarly, if someone is likely to have a more aggressive form of the disease, then the evidence suggests that the sooner we can start them on the best available treatments, the better we can manage their condition."

Shifting from a 'one size fits all' approach

The researchers say that the test compares to biomarkers for cancer, which have contributed to the creation of new treatments.

A company co-founded by Prof. Ken Smith, senior author of the study, with support from Cambridge Enterprise, a branch of Cambridge University is now focusing on developing the new test further.

"IBD can be a very debilitating disease, but this new test could help us transform treatment options, moving away from a 'one size fits all' approach to a personalized approach to treating patients," said Prof. Smith.

Helen Terry, Director of Research at Crohn's & Colitis U.K., welcomed the new approach as "really exciting." She explains that the latest study is the accumulation of a decade of medical research and could "drastically change" the lives of those people with IBD.

The research team also illustrates the relevance of its work with a case study that shows how one individual would have benefited from the new prognostic test and a more personalized approach.

The 31-year-old woman received a Crohn's disease diagnosis when she was 14 years old. She underwent bowel resection, but symptoms returned. Different medications failed, and she had drug side effects that lead to more admissions to the hospital.

With a badly damaged bowel, the patient needed another surgical procedure when she was 20 years of age, which was followed by more drug treatment.

The Cambridge researchers believe that a prognostic test would have allowed the woman to be more aware of her disease's likely course, and it would have allowed her to try stronger treatments earlier.

Hypertension

Can drinking mineral-rich water prevent hypertension? (Medical News Today:20190513)

<https://www.medicalnewstoday.com/articles/325139.php>

Could adding calcium and magnesium to drinking water be a practical way to lower high blood pressure in people who live in areas where drinking water is deficient in these minerals?

Could drinking higher-salinity water help lower blood pressure?

A recent study has linked drinking water of higher salinity to lower blood pressure in people living in a coastal region of Bangladesh. Sources of drinking water in the region can vary in salinity due to the influx of seawater.

While water of higher salinity contains more sodium, which can raise blood pressure, it also has more calcium and magnesium. The researchers explain this in a Journal of the American Heart Association paper about the study.

"Calcium and magnesium are protective; they decrease blood pressure," says lead study author Abu Mohammed Naser, who is a postdoctoral fellow in the Rollins School of Public Health at Emory University in Atlanta, GA.

He and his co-authors attribute the study's findings to the benefits of magnesium and calcium outweighing the harms of sodium.

Data on water salinity, blood pressure limited

High blood pressure, or hypertension, is the "leading preventable cause" of early deaths worldwide, according to a 2016 Circulation study that estimated that 1.39 billion people were living with the condition in 2010.

Having blood pressure that is too high increases the force that circulating blood exerts on artery walls. If the condition persists, it can damage the heart and raise the risk of stroke and other health problems.

This unlikely culprit may cause drug-resistant high blood pressure

A study of male veterans links buildup of lead in the body to increased risk of high blood pressure that is hard to treat.

According to the Centers for Disease Control and Prevention (CDC), there are around 75 million adults with high blood pressure in the United States, where the condition contributed to or caused more than 410,000 deaths in 2014.

Studying people who live in coastal regions offers a useful way to compare the effects of varying water salinity on health.

Naser and his colleagues note that groundwater is the main source of drinking water for more than 1 billion people who live in coastal regions.

Of this population, around a fifth live in areas in which seawater flows into groundwater, giving rise to varying levels of mineralization.

However, they note that data on "drinking water salinity, mineral intake, and cardiovascular health of the population," are limited.

Calcium and magnesium 'counteract' sodium

Their analysis took in data from two studies that had kept track of people in various parts of coastal Bangladesh. The measurements covered periods in which the salinity of drinking water varied as a result of monsoons and dry weather.

The team found that people who drank water of mild or moderate salinity had more sodium in their urine than people who drank fresh water of low salinity. Also, those with higher levels of urinary sodium also had higher systolic blood pressure.

In addition, the analysis revealed that those who drank water of mild and moderate salinity had higher levels of calcium and magnesium in their urine. Having higher levels of these minerals has associations with lower systolic and diastolic blood pressure.

For example, people who drank "mildly-salinated" water had an average systolic blood pressure that was 1.55 of mercury (mm Hg) lower and an average diastolic blood pressure that was 1.26 mm Hg lower than those who drank fresh water.

Systolic blood pressure is the pressure of blood in arteries during a heartbeat while diastolic is the pressure between heartbeats. Systolic is typically the higher of the two numbers.

The authors hypothesize "that the [blood pressure]-lowering effects of [calcium] and [magnesium] counteracted the harmful effects of [sodium] [...]."

They cite studies that have found similar effects in other parts of the world. Some of these studies have linked drinking calcium- and magnesium-rich water to a reduction in deaths due to cardiovascular causes.

Proving the case for fortifying drinking water

Dr. Robert M. Carey, who is a professor of medicine at the University of Virginia in Charlottesville, helped to produce the American Heart Association (AHA) and the American College of Cardiology's latest guidelines on blood pressure. He was not involved in the study and made some comments about it.

He notes that while the reductions in blood pressure are not great, they are large enough to make a difference, and therefore, these results warrant further investigation.

He continues, "I think it's pretty clear from many different studies that a small reduction in blood pressure, done consistently, can have a major impact in reducing cardiovascular disease and stroke."

He points out that the study does not show that adding calcium and magnesium to drinking water actually lowers blood pressure. It is for further studies, conducted in clinical settings, to investigate this, he explains.

If further research indeed establishes that fortifying drinking water with calcium and magnesium can lower blood pressure, then that could be a completely new approach to dealing with hypertension as a public health issue.

The convention until now, Dr. Carey explains, has been to "wait until someone becomes hypertensive" and then proceed with lifestyle changes and drug treatments to help them manage their blood pressure. "I think we need to do both," he suggests.

The AHA recommends that people should get the vitamins and minerals that they need by following a healthful diet. The Academy of Nutrition and Dietetics also support this and do not recommend the use of supplements as a way to protect against chronic disease.

However, the researchers point out that most people in the U.S. do not meet the daily recommended intake for minerals: they don't eat sufficient amounts of the foods that are rich in them.

Naser states that depleting mineral levels in the soil due to "over-farming" and alteration in rainfall from climate change may also be a factor. Fortifying drinking water with beneficial minerals could make up the shortfall, he suggests.

He also points out that the body absorbs minerals better from drinking water than from food, where their "bioavailability" could be lower.

The authors conclude: "Ensuring optimum concentrations of [calcium] and [magnesium] in drinking water may be an important public health and nutritional intervention to ensure fulfillment of daily requirements of these essential macro-minerals since evidence suggests that globally, concentrations of these minerals are decreasing in the diet."