

# YourHealthNews

September – October 2017

Do you indulge too much on ham, salami, sausages, hotdogs and bacon? If yes, better start reducing, if possible avoid, consumption of these 'processed meats'. This is according to a published report entitled *"Diet, nutrition, physical activity and colorectal cancer"*.<sup>1</sup>

The report conducted together by the *American Institute for Cancer Research* and the *World Cancer Research Fund* analyzed 99 studies worldwide with more than 29 million participants of whom at least 250,000 have developed colorectal cancer (CRC). It studied certain lifestyle factors associated with the risk of developing CRC, the fourth most common type of cancer globally.

After thorough analyses of the studies included, the researchers found strong convincing evidence that processed meat increases the

## DITCH THE HAM, SAUSAGES AND BACON TO AVOID COLORECTAL CANCER, STUDY SHOWS

risk of developing CRC; whereas, being physically active decreases it. Specifically, the risk rises by 16% when one consumes 50 grams of processed meat daily. On the other hand, CRC risk declines by 20%



when a person is physically active.

Also in the report are other important lifestyle factors that have strong evidence of increasing the risk

include: being overweight or obese, high red meat intake, and more than two alcoholic drinks daily. In contrast, high intake of wholegrains, foods that contain dietary fibers and dairy products all have strong association with lowering the risk of CRC.

Further, it also stated that consuming fish and foods that have vitamin C may lessen the risk of developing colorectal cancer. However, limited evidence were noted in the analysis.

This report underlines the importance of living a healthy lifestyle as a valuable preventive method in colorectal cancer.

With the rising trend of colorectal cancer, adopting a healthy lifestyle in our diet and having regular exercise may help combat the risk of developing the disease.

## A new method to diagnose Alzheimer's disease shows promising results

Alzheimer's disease (AD) is the most common type of dementia and considered to be an incurable condition, which is often diagnosed late. However, early detection can lead to appropriate clinical intervention that may delay or even prevent the progression of the debilitating disease.

Lately, a study conducted in the UK provided a promising method of detecting Alzheimer's disease and differentiating it with other forms of dementia.<sup>2</sup>

The investigators used a sensor-based technology (spectroscopy) to analyze more than 500 blood samples of both patients with dementia and healthy participants.

They found that the noninvasive and inexpensive technique can identify AD with 70% specificity and sensitivity as well as be identified separately with other types of dementia.

Researchers believed that their method for detecting AD is a step-forward to early detection and early intervention of Alzheimer's disease.

## New rare genetic marker associated with Schizophrenia discovered

Schizophrenia is a chronic, severe psychiatric condition that is characterized by altered experience of reality, disorganized thoughts or speech, and deranged involvement in daily activities. It is believed to be an inherited disease due to more than 80% of patients of schizophrenia having a family with the same disorder. However, the specific genetic causes are still unknown.

Until recently, Japanese scientists discovered a new, rare genetic variant, R292H in RTN4R, which may have strong association with schizophrenia.<sup>3</sup>

As schizophrenia involves disturbances in neural circuits of the brain and myelin functions as an important part in the signaling pathway of these circuits, the researchers hypothesized that genes related to myelin could be contributors to the development of schizophrenia.

In the study, the investigators explored rare variants of the gene

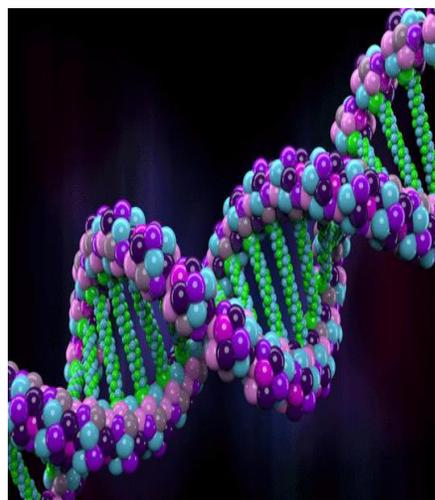
RTN4 through its subunit protein RTN4R. RTN4 gene was used as it is involved in the regulatory functioning of neural circuits and also located in chromosome 22q11.2, a known hotspot region for schizophrenia.

When they performed a mutation screening of the 370 patients with schizophrenia, they found a single missense mutation, R292H.

This mutation is located in the domain of the RTN4R that binds to ligands. Since a mutation occurred, it can theoretically result in changes in RTN4 regulatory functions. In order

to see this occurrence, they expressed the same mutation in chick retinal cells and found that there was a significant change in the behavior of the nerve's synapses.

Due to these results, they were convinced that rare genetic variants may act as risk factors for schizophrenia, adding further evidence to the genetic etiology of psychiatric disorder.



## Tea tree oil effective in treating acne, study reveals

We all have at one point in our lives when we had acne. Most probably had it during our teens and others may have some breakouts even until adulthood.

Although benign, acne may result in psychosocial effects such as poor body image, low self-confidence, and social isolation.

Numerous gels and creams are readily available for treatment of mild to moderate acne in the market. A lot are effective in clearing most acne lesions such as benzoyl peroxide and antibiotic creams. Yet, the long-term use of antibiotic creams are usually discouraged due to possible occurrence of resistant strains of *Propionibacterium acnes*, the bacteria responsible for acne.

As such, alternative treatments were being used and have been commercially accessible. But the effectivity and safety profile of most of these agents are doubtful.

In a recent pilot study published at the *Australasian Journal of Dermatology*, experts from Western Australia have demonstrated that tea tree oil, a common readily

available alternative agents for acne, is effective in improving mild to moderate acne.<sup>4</sup>

Eighteen volunteers, aged 14-45 years old, were provided with tea tree oil products (a face wash and a gel) to apply on their faces twice daily for three months. Then, they were assessed every month as to



efficacy, tolerability, and product acceptability.

Results showed that tea tree oil significantly improved lesions from baseline to the end of the treatment protocol by at least 40%.

It was also noted to be clinically effective in 79% of the participants

the participants.

With these auspicious findings, the researchers believed that it may be due to the antibacterial property of the tea tree oil. This was further established when both products showed activity against *P. acnes* on laboratory testing, which they have also conducted in their research.

with no serious adverse reactions identified. The product was also highly accepted by

As it is a pilot study, further investigation with a larger number of volunteers is needed to confirm these results.

In the meantime, it is best to consult a dermatologist or a general practitioner before trying out on any over-the-counter products for breakouts. These experts can provide with the best management option available for treating acne.

It is also recommended to avoid trying to prick them as infection may be introduced that may result in unwanted scarring or infectious complications.

## Happy music helps in creativity, research says

Listening to music is an entertaining past time. It makes someone feel good, relaxed and happy.

Now, it may be helpful in boosting creativity. This is according to boffins from the Netherlands and Australia, who published their work in the journal *PLOS One*.

The research is a first of its kind that investigated the effect of music on creative cognition, which is described as the ability to provide creative ideas and solutions to problems.

More than 150 volunteers have taken part in the research. They were assembled into five groups. Four groups were listening to one of four different types of music; namely, calm, happy, sad or anxious. The fifth group was the silence control group.

After listening, they were asked to perform various cognitive tasks to determine their divergent and convergent creative thinking scores. Higher divergent thinking scores

were given to those who offered the most original and useful solutions to the tasks; whereas, higher convergent thinking scores were provided to those who gave a single best possible solution to the task.

The outcome showed that those participants who listened to happy music described as a music piece with positive valence and high arousal have higher divergent thinking scores, but not convergent thinking scores, compared to the other music groups.

Additionally, those in the 'happy' group were also significantly performing better than those in the 'silence' group in divergent thinking.

With these results, the investigators concluded that happy music may boost creative thinking. They also added that it may be useful as an inexpensive tool to promote creative thinking in a lot of settings and situations.



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