TMS TRENDS

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BRAIN FOOD: FRUIT AND VEGGIES AREN'T ONLY GOOD FOR A HEALTHY BODY

Eating a Mediterranean diet or other healthy dietary pattern comprising of fruit, vegetables, legumes, and nuts and low in processes meats, is associated with preventing the onset of depression, according to research published in the open access journal *BMC (BioMed Central) Medicine.* This large study of 15,093 people marks the first time that several healthy dietary patterns have been assessed for their association with the risk of depression. The results suggest depression could be linked with nutrient deficits; it was found that common nutrients and food items such as omega-3 fatty acids, vegetables, fruits, legumes, nuts and moderate alcohol intake present in both diet patterns (Alternative Healthy Eating Index-2010 and Mediterranean Diet) could be responsible for the observed reduced risk of depression.

Lead researcher, Almundena Sanches-Villegas says, "A threshold effect may exist. The noticeable difference occurs when participants start to follow a healthier diet. Even a moderate adherence to these healthy dietary patterns was associated with an important reduction in the risk of developing depression. However, we saw no extra benefit when participants showed high or very high adherence to the diets. So, once the threshold is achieved, the reduced risk plateaus even if participants were stricter with their diets and eating more healthily. This dose-response pattern is compatible with the hypothesis that suboptimal intake of some nutrients (mainly located in low adherence levels) may represent a risk factor for future depression."

More research is needed to predict the role of nutrient intake for neurophysiological requirements and identify the role of micronutrients (minerals and vitamins) and macronutrients (proteins, fats and carbohydrates) that interact with depression.

FEELING BLUE AND SEEING BLUE

The world might seem a little grayer than usual when we're down in the dumps and we often talk about "feeling blue" – new research suggests that the associations we make between emotion and color go beyond mere metaphor. The results of two studies indicate that feeling sadness may actually change how we perceive color. Specifically, researchers found that participants who were induced to feel sad were less accurate in identifying colors on the blue-yellow axis than those who were led to feel amused or emotionally neutral.

The research is published in *Psychological Science*, a journal of the Association for Psychological Science. "Our results show that mood and emotion can affect how we see the world around us," says psychology researcher Christopher Thorstenson of the University of Rochester. "Our work advances the study of perception by showing that sadness specifically impairs basic visual processes that are involved in perceiving color."

Thorstenson continues, "We did not predict this specific finding, although it might give us a clue to the reason for the effect in neurotransmitter functioning." The researchers note that previous work has specifically linked color perception on the blue-yellow axis with the neurotransmitter dopamine.

NEW TMS DEVICES APPROVED

Two devices utilizing repetitive transcranial magnetic stimulation (rTMS) technology have been approved by the FDA for use in clinical treatment.

Magstim, a company based in the UK, and MagVenture, a company based in Denmark have expanded globally, to provide this cutting-edge technology to both clinicians and researchers.