Emotional Stability, Well-Being Improve with Age

As people grow older, they become "mellower" in their response to negative emotions, and emotional stability continues to improve over the course of the human life span, even into the seventh decade of life, according to a new report. Neuroscientists studied a group of healthy individuals between the ages of 12 and 79, using emotional well-being questionnaires as well as brain imaging studies. They found that neurotic tendencies decreased with advancing age, with those aged 12-19 reporting the highest level of neurosis, and those aged 50-79 reporting the lowest level. Using functional MRI testing and measurements of brain electrical activity, the scientists found that younger age groups were better able to recognize facial expressions of fear, but less accurate at identifying expressions of happiness. In older adults, the medial prefrontal cortex, an area of the brain that plays a role in coordinating thoughts and actions with internal goals, was more active when processing negative emotions than positive emotions.

These findings led the scientists to propose that life experience and changing motivational goals may help older adults to increase their control over both negative and positive emotions, helping them to maintain mental health, even in the face of difficult life events.

—Elizabeth Wagner, ND

Milk Thistle Compound Suppresses Prostate Cancer

Isosilybin B, an active constituent of silymarin found in milk thistle, suppresses the growth of prostate cancer cells far more effectively than other milk thistle compounds and extracts, according to a recently published report. Scientists have known for some time that milk thistle (Silybum marianum) offers protection against some forms of prostate cancer. Two extracts of milk thistle seed, silymarin and silibinin, have long been recommended for liver support and various other health benefits. Scientists recently tested several active constituents of silymarin and silibinin to determine which exerted the most powerful effects against prostate cancer. Isosilybin B, which is present only in silymarin, was the most consistently potent suppressor of cell growth compared to other milk thistle constituents and extracts. Isosilybin B accounts for no more than 5% of silymarin and is not contained in silibinin. The researchers thus concluded that milk thistle extracts enriched for isosilybin B, or isosilybin B alone, may prove most effective in prostate cancer prevention and treatment.

—Dale Kiefer

Cystatin C Valuable in Detecting Kidney Dysfunction

Cystatin C is a more sensitive indicator of early kidney dysfunction than the currently used biomarker, according to a report in the Annals of Internal Medicine. This is a welcome finding, as kidney disease affects approximately 5% of adults over the age of 20 but is often undetected until its later stages. Scientists compared the prognostic value of cystatin C and creatinine in detecting early kidney impairment. Creatinine, a normal by-product of muscle breakdown, is currently used to estimate glomerular filtration rate, an indicator of kidney function. Cystatin-C was found capable of detecting early kidney disease considerably sooner than creatinine or estimated glomerular filtration rate. Unlike creatinine, cystatin-C is not affected by variables such as age, gender, or race, and is thus a more sensitive and useful test for detecting kidney dysfunction.

Scientists have previously demonstrated that, among apparently healthy elderly people, cystatin C is a better predictor of mortality risk from various causes than either creatinine or estimated glomerular filtration rate.

—Dale Kiefer