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(Aune, Keum et al. 2016; Bechtold, Hipwell et al. 2016; Bianchi and Vohs 2016; Binder and Coad 2016; Brunkwall, Chen et al. 2016; David and Haws 2016; Demakakos, Pillas et al. 2016; Emanuel, Onwuteaka-Philipsen et al. 2016; Fiddick, Brase et al. 2016; Flegal, Kruszon-Moran et al. 2016; Force 2016; Franco, Chowdhury et al. 2016; Hansen, Sønderskov et al. 2016; Hopfinger, Berking et al. 2016; Hyde, Waller et al. 2016; Ierodiakonou, Garcia-Larsen et al. 2016; Jakubiak and Feeney 2016; Jensen, Christensen et al. 2016; Kendler, Lönn et al. 2016; Khera, Murad et al. 2016; Knudsen, Zauber et al. 2016; Koukouna, Bossini et al. 2016; Lemay 2016; Li, He et al. 2016; Lin, Piper et al. 2016; Linde, Allais et al. 2016; Mac Carron, Kaski et al. 2016; Martineau, Cates et al. 2016; Meier, Caspi et al. 2016; Meltzer and McNulty 2016; Morawska, Mitchell et al. 2016; Niemelä, Sourander et al. 2016; Pandey, Patel et al. 2016; Purdue-Smithe, Manson et al. 2016; Reitz, Motti-Stefanidi et al. 2016; Roberts 2016; Robinson, Wayne et al. 2016; Schleicher, Sternberg et al. 2016; Sherman, Lerner et al. 2016; Silventoinen, Jelenkovic et al. 2016; Skovlund, Mørch et al. 2016; Spiers, Qassem et al. 2016; Stickley and Koyanagi 2016; Stubbs, Vancampfort et al. 2016; van den Berg, Marijnissen et al. 2016; Waller, Kaprio et al. 2016; Xu and Metcalfe 2016; Yu, Malik et al. 2016)

Aune, D., N. Keum, et al. (2016). ***"Whole grain consumption and risk of cardiovascular disease, cancer, and all cause and cause specific mortality: Systematic review and dose-response meta-analysis of prospective studies."*** BMJ 353: i2716. http://www.bmj.com/content/353/bmj.i2716

(Available in free full text) OBJECTIVE: To quantify the dose-response relation between consumption of whole grain and specific types of grains and the risk of cardiovascular disease, total cancer, and all cause and cause specific mortality. DATA SOURCES: PubMed and Embase searched up to 3 April 2016. STUDY SELECTION: Prospective studies reporting adjusted relative risk estimates for the association between intake of whole grains or specific types of grains and cardiovascular disease, total cancer, all cause or cause specific mortality. DATA SYNTHESIS: Summary relative risks and 95% confidence intervals calculated with a random effects model. RESULTS: 45 studies (64 publications) were included. The summary relative risks per 90 g/day increase in whole grain intake (90 g is equivalent to three servings-for example, two slices of bread and one bowl of cereal or one and a half pieces of pita bread made from whole grains) was 0.81 (95% confidence interval 0.75 to 0.87; I(2)=9%, n=7 studies) for coronary heart disease, 0.88 (0.75 to 1.03; I(2)=56%, n=6) for stroke, and 0.78 (0.73 to 0.85; I(2)=40%, n=10) for cardiovascular disease, with similar results when studies were stratified by whether the outcome was incidence or mortality. The relative risks for morality were 0.85 (0.80 to 0.91; I(2)=37%, n=6) for total cancer, 0.83 (0.77 to 0.90; I(2)=83%, n=11) for all causes, 0.78 (0.70 to 0.87; I(2)=0%, n=4) for respiratory disease, 0.49 (0.23 to 1.05; I(2)=85%, n=4) for diabetes, 0.74 (0.56 to 0.96; I(2)=0%, n=3) for infectious diseases, 1.15 (0.66 to 2.02; I(2)=79%, n=2) for diseases of the nervous system disease, and 0.78 (0.75 to 0.82; I(2)=0%, n=5) for all non-cardiovascular, non-cancer causes. Reductions in risk were observed up to an intake of 210-225 g/day (seven to seven and a half servings per day) for most of the outcomes. Intakes of specific types of whole grains including whole grain bread, whole grain breakfast cereals, and added bran, as well as total bread and total breakfast cereals were also associated with reduced risks of cardiovascular disease and/or all cause mortality, but there was little evidence of an association with refined grains, white rice, total rice, or total grains. CONCLUSIONS: This meta-analysis provides further evidence that whole grain intake is associated with a reduced risk of coronary heart disease, cardiovascular disease, and total cancer, and mortality from all causes, respiratory diseases, infectious diseases, diabetes, and all non-cardiovascular, non-cancer causes. These findings support dietary guidelines that recommend increased intake of whole grain to reduce the risk of chronic diseases and premature mortality.

Bechtold, J., A. Hipwell, et al. (2016). ***"Concurrent and sustained cumulative effects of adolescent marijuana use on subclinical psychotic symptoms."*** American Journal of Psychiatry 173(8): 781-789. http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2016.15070878

Objective: Adolescents who regularly use marijuana may be at heightened risk of developing subclinical and clinical psychotic symptoms. However, this association could be explained by reverse causation or other factors. To address these limitations, the current study examined whether adolescents who engage in regular marijuana use exhibit a systematic increase in subclinical psychotic symptoms that persists during periods of sustained abstinence. Method:The sample comprised 1,009 boys who were recruited in 1st and 7th grades. Self-reported frequency of marijuana use, subclinical psychotic symptoms, and several time-varying confounds (e.g., other substance use, internalizing/externalizing problems) were recorded annually from age 13 to 18. Fixed-effects (within-individual change) models examined whether adolescents exhibited an increase in their subclinical psychotic symptoms as a function of their recent and/or cumulative history of regular marijuana use and whether these effects were sustained following abstinence. Models controlled for all time-stable factors (default) and several time-varying covariates as potential confounds. Results:For each year adolescent boys engaged in regular marijuana use, their expected level of subsequent subclinical psychotic symptoms rose by 21% and their expected odds of experiencing subsequent subclinical paranoia or hallucinations rose by 133% and 92%, respectively. The effect of prior regular marijuana use on subsequent subclinical psychotic symptoms persisted even when adolescents stopped using marijuana for a year. These effects were after controlling for all time-stable and several time-varying confounds. No support was found for reverse causation. Conclusions:These results suggest that regular marijuana use may significantly increase the risk that an adolescent will experience persistent subclinical psychotic symptoms.

Bianchi, E. C. and K. D. Vohs (2016). ***"Social class and social worlds: Income predicts the frequency and nature of social contact."*** Social Psychological and Personality Science 7(5): 479-486. http://spp.sagepub.com/content/7/5/479.abstract

Does access to money predict social behavior? Past work has shown that money fosters self-sufficiency and reduces interest in others. Building on this work, we tested whether income predicts the frequency and type of social interactions. Two studies using large, nationally representative samples of Americans (N = 118,026) and different measures of social contact showed that higher household income was associated with less time spent socializing with others (Studies 1 and 2) and more time spent alone (Study 2). Income also predicted the nature of social contact. People with higher incomes spent less time with their families and neighbors and spent more time with their friends. These findings suggest that income is associated with how and with whom people spend their time.

Binder, M. and A. Coad (2016). ***"How satisfied are the self-employed? A life domain view."*** Journal of Happiness Studies 17(4): 1409-1433. http://dx.doi.org/10.1007/s10902-015-9650-8

It is well-known in the literature that self-employment positively influences job satisfaction, but the effects on other life domains and overall life satisfaction are much less clear. Our study analyzes the welfare effects of self-employment apart from

its monetary aspects, and focuses on the overall life satisfaction as well as different domain satisfactions of self-employed individuals in our German sample from 1997 to 2010. Using matching estimators to create an appropriate control group and differentiating between different types of self-employment, we find that voluntary self-employment brings with it positive benefits apart from work satisfaction, and leads to higher overall life satisfaction as well as increased health satisfaction, all of which increase in the first three years of self-employment. Being forced into self-employment to escape unemployment, however, confers no such benefits. Additionally, both types of self-employment lead to increasing dissatisfaction with one's leisure time.

Brunkwall, L., Y. Chen, et al. (2016). ***"Sugar-sweetened beverage consumption and genetic predisposition to obesity in 2 swedish cohorts."*** The American Journal of Clinical Nutrition 104(3): 809-815. http://ajcn.nutrition.org/content/104/3/809.abstract

Background: The consumption of sugar-sweetened beverages (SSBs), which has increased substantially during the last decades, has been associated with obesity and weight gain. Objective: Common genetic susceptibility to obesity has been shown to modify the association between SSB intake and obesity risk in 3 prospective cohorts from the United States. We aimed to replicate these findings in 2 large Swedish cohorts. Design: Data were available for 21,824 healthy participants from the Malmö Diet and Cancer study and 4902 healthy participants from the Gene-Lifestyle Interactions and Complex Traits Involved in Elevated Disease Risk Study. Self-reported SSB intake was categorized into 4 levels (seldom, low, medium, and high). Unweighted and weighted genetic risk scores (GRSs) were constructed based on 30 body mass index [(BMI) in kg/m2]-associated loci, and effect modification was assessed in linear regression equations by modeling the product and marginal effects of the GRS and SSB intake adjusted for age-, sex-, and cohort-specific covariates, with BMI as the outcome. In a secondary analysis, models were additionally adjusted for putative confounders (total energy intake, alcohol consumption, smoking status, and physical activity). Results: In an inverse variance-weighted fixed-effects meta-analysis, each SSB intake category increment was associated with a 0.18 higher BMI (SE = 0.02; P = 1.7 × 10−20; n = 26,726). In the fully adjusted model, a nominal significant interaction between SSB intake category and the unweighted GRS was observed (P-interaction = 0.03). Comparing the participants within the top and bottom quartiles of the GRS to each increment in SSB intake was associated with 0.24 (SE = 0.04; P = 2.9 × 10−8; n = 6766) and 0.15 (SE = 0.04; P = 1.3 × 10−4; n = 6835) higher BMIs, respectively. Conclusions: The interaction observed in the Swedish cohorts is similar in magnitude to the previous analysis in US cohorts and indicates that the relation of SSB intake and BMI is stronger in people genetically predisposed to obesity.

David, M. E. and K. L. Haws (2016). ***"Saying "no" to cake or "yes" to kale: Approach and avoidance strategies in pursuit of health goals."*** Psychology & Marketing 33(8): 588-594. http://dx.doi.org/10.1002/mar.20901

In developing plans for achieving health-related goals, two fundamentally different strategies are often used: focusing on healthy foods that one should include in their diet, such as kale (referred to as "approach"), and focusing on unhealthy foods that one should exclude from their diet, such as cake (referred to as "avoidance"). The present research examines the differential effectiveness of approach- and avoidance-based strategies across levels of self-control, highlighting differences in food choices. The results reveal that those low in self-control focus on avoidance items they really like and approach items that are less appealing, while those higher in self-control show an opposite pattern, leading to more-motivating plans. In addition, the results show that the self-control by strategy type interaction on liking leads to differences in propensity to choose healthy items. Overall, this research highlights the importance of understanding differences in the implementation of commonly recommended strategies to improve one's health and wellness. [And see the excellent BPS Research Digest discussion of this paper at https://digest.bps.org.uk/2016/08/18/people-with-high-self-control-have-a-cunning-approach-to-healthy-eating/ -more-8197].

Demakakos, P., D. Pillas, et al. (2016). ***"Parenting style in childhood and mortality risk at older ages: A longitudinal cohort study."*** The British Journal of Psychiatry 209(2): 135-141 http://bjp.rcpsych.org/content/early/2016/02/19/bjp.bp.115.163543

Background Parenting style is associated with offspring health, but whether it is associated with offspring mortality at older ages remains unknown. Aims We examined whether childhood experiences of suboptimal parenting style are associated with increased risk of death at older ages. Method Longitudinal cohort study of 1964 community-dwelling adults aged 65–79 years. Results The association between parenting style and mortality was inverse and graded. Participants in the poorest parenting style score quartile had increased risk of death (hazard ratio (HR) = 1.72, 95% CI 1.20–2.48) compared with those in the optimal parenting style score quartile after adjustment for age and gender. Full adjustment for covariates partially explained this association (HR = 1.49, 95% CI 1.02–2.18). Parenting style was inversely associated with cancer and other mortality, but not cardiovascular mortality. Maternal and paternal parenting styles were individually associated with mortality. Conclusions Experiences of suboptimal parenting in childhood are associated with increased risk of death at older ages.

Emanuel, E. J., B. D. Onwuteaka-Philipsen, et al. (2016). ***"Attitudes and practices of euthanasia and physician-assisted suicide in the United States, Canada, and Europe."*** JAMA 316(1): 79-90. http://dx.doi.org/10.1001/jama.2016.8499

Importance The increasing legalization of euthanasia and physician-assisted suicide worldwide makes it important to understand related attitudes and practices. Objective To review the legal status of euthanasia and physician-assisted suicide and the available data on attitudes and practices. Evidence Review Polling data and published surveys of the public and physicians, official state and country databases, interview studies with physicians, and death certificate studies (the Netherlands and Belgium) were reviewed for the period 1947 to 2016.Findings Currently, euthanasia or physician-assisted suicide can be legally practiced in the Netherlands, Belgium, Luxembourg, Colombia, and Canada (Quebec since 2014, nationally as of June 2016). Physician-assisted suicide, excluding euthanasia, is legal in 5 US states (Oregon, Washington, Montana, Vermont, and California) and Switzerland. Public support for euthanasia and physician-assisted suicide in the United States has plateaued since the 1990s (range, 47%-69%). In Western Europe, an increasing and strong public support for euthanasia and physician-assisted suicide has been reported; in Central and Eastern Europe, support is decreasing. In the United States, less than 20% of physicians report having received requests for euthanasia or physician-assisted suicide, and 5% or less have complied. In Oregon and Washington state, less than 1% of licensed physicians write prescriptions for physician-assisted suicide per year. In the Netherlands and Belgium, about half or more of physicians reported ever having received a request; 60% of Dutch physicians have ever granted such requests. Between 0.3% to 4.6% of all deaths are reported as euthanasia or physician-assisted suicide in jurisdictions where they are legal. The frequency of these deaths increased after legalization. More than 70% of cases involved patients with cancer. Typical patients are older, white, and well-educated. Pain is mostly not reported as the primary motivation. A large portion of patients receiving physician-assisted suicide in Oregon and Washington reported being enrolled in hospice or palliative care, as did patients in Belgium. In no jurisdiction was there evidence that vulnerable patients have been receiving euthanasia or physician-assisted suicide at rates higher than those in the general population. Conclusions and Relevance Euthanasia and physician-assisted suicide are increasingly being legalized, remain relatively rare, and primarily involve patients with cancer. Existing data do not indicate widespread abuse of these practices.

Fiddick, L., G. L. Brase, et al. (2016). ***"Major personality traits and regulations of social behavior: Cheaters are not the same as the reckless, and you need to know who you're dealing with."*** Journal of Research in Personality 62: 6-18. http://www.sciencedirect.com/science/article/pii/S0092656616300101

This research explores the hypothesis that major personality traits are systematically associated with social regulation response tendencies. Specifically, the adaptive function of specific traits from 'Big-Five' and HEXACO models were evaluated in terms of how they are understood and utilized in predicting the behaviors of others. Big-Five factors of agreeableness and conscientiousness track tendencies to obey or break social contract and precautionary rules, but not discriminatively nor as predicted. HEXACO traits, however, provided discriminative patterns of associations between personality and response tendencies (within individuals and for third-person associations, cross-culturally) in greater accord with previous work. Honesty–humility is associated with social contract behaviors and conscientiousness is associated with precaution behaviors, consistent with conceptualizations as psychological adaptations for tracking fitness-relevant individual differences.

Flegal, K. M., D. Kruszon-Moran, et al. (2016). ***"Trends in obesity among adults in the United States, 2005 to 2014."*** JAMA 315(21): 2284-2291. http://dx.doi.org/10.1001/jama.2016.6458

Importance Between 1980 and 2000, the prevalence of obesity increased significantly among adult men and women in the United States; further significant increases were observed through 2003-2004 for men but not women. Subsequent comparisons of data from 2003-2004 with data through 2011-2012 showed no significant increases for men or women. Objective To examine obesity prevalence for 2013-2014 and trends over the decade from 2005 through 2014 adjusting for sex, age, race/Hispanic origin, smoking status, and education. Design, Setting, and Participants Analysis of data obtained from the National Health and Nutrition Examination Survey (NHANES), a cross-sectional, nationally representative health examination survey of the US civilian noninstitutionalized population that includes measured weight and height.Exposures Survey period. Main Outcomes and Measures Prevalence of obesity (body mass index ≥30) and class 3 obesity (body mass index ≥40). Results This report is based on data from 2638 adult men (mean age, 46.8 years) and 2817 women (mean age, 48.4 years) from the most recent 2 years (2013-2014) of NHANES and data from 21 013 participants in previous NHANES surveys from 2005 through 2012. For the years 2013-2014, the overall age-adjusted prevalence of obesity was 37.7% (95% CI, 35.8%-39.7%); among men, it was 35.0% (95% CI, 32.8%-37.3%); and among women, it was 40.4% (95% CI, 37.6%-43.3%). The corresponding prevalence of class 3 obesity overall was 7.7% (95% CI, 6.2%-9.3%); among men, it was 5.5% (95% CI, 4.0%-7.2%); and among women, it was 9.9% (95% CI, 7.5%-12.3%). Analyses of changes over the decade from 2005 through 2014, adjusted for age, race/Hispanic origin, smoking status, and education, showed significant increasing linear trends among women for overall obesity (P = .004) and for class 3 obesity (P = .01) but not among men (P = .30 for overall obesity; P = .14 for class 3 obesity). Conclusions and Relevance In this nationally representative survey of adults in the United States, the age-adjusted prevalence of obesity in 2013-2014 was 35.0% among men and 40.4% among women. The corresponding values for class 3 obesity were 5.5% for men and 9.9% for women. For women, the prevalence of overall obesity and of class 3 obesity showed significant linear trends for increase between 2005 and 2014; there were no significant trends for men. Other studies are needed to determine the reasons for these trends.

Force, U. S. P. S. T. (2016). ***"Screening for colorectal cancer: US preventive services task force recommendation statement."*** JAMA 315(23): 2564-2575. http://dx.doi.org/10.1001/jama.2016.5989

(Available in free full text) Importance Colorectal cancer is the second leading cause of cancer death in the United States. In 2016, an estimated 134 000 persons will be diagnosed with the disease, and about 49 000 will die from it. Colorectal cancer is most frequently diagnosed among adults aged 65 to 74 years; the median age at death from colorectal cancer is 68 years.Objective To update the 2008 US Preventive Services Task Force (USPSTF) recommendation on screening for colorectal cancer. Evidence Review The USPSTF reviewed the evidence on the effectiveness of screening with colonoscopy, flexible sigmoidoscopy, computed tomography colonography, the guaiac-based fecal occult blood test, the fecal immunochemical test, the multitargeted stool DNA test, and the methylated SEPT9 DNA test in reducing the incidence of and mortality from colorectal cancer or all-cause mortality; the harms of these screening tests; and the test performance characteristics of these tests for detecting adenomatous polyps, advanced adenomas based on size, or both, as well as colorectal cancer. The USPSTF also commissioned a comparative modeling study to provide information on optimal starting and stopping ages and screening intervals across the different available screening methods. Findings The USPSTF concludes with high certainty that screening for colorectal cancer in average-risk, asymptomatic adults aged 50 to 75 years is of substantial net benefit. Multiple screening strategies are available to choose from, with different levels of evidence to support their effectiveness, as well as unique advantages and limitations, although there are no empirical data to demonstrate that any of the reviewed strategies provide a greater net benefit. Screening for colorectal cancer is a substantially underused preventive health strategy in the United States. Conclusions and Recommendations The USPSTF recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years (A recommendation). The decision to screen for colorectal cancer in adults aged 76 to 85 years should be an individual one, taking into account the patient's overall health and prior screening history (C recommendation).

Franco, O. H., R. Chowdhury, et al. (2016). ***"Use of plant-based therapies and menopausal symptoms: A systematic review and meta-analysis."*** JAMA 315(23): 2554-2563. http://dx.doi.org/10.1001/jama.2016.8012

Importance Between 40% and 50% of women in Western countries use complementary therapies to manage menopausal symptoms. Objective To determine the association of plant-based therapies with menopausal symptoms, including hot flashes, night sweats, and vaginal dryness. Data Sources The electronic databases Ovid MEDLINE, EMBASE, and Cochrane Central were systematically searched to identify eligible studies published before March 27, 2016. Reference lists of the included studies were searched for further identification of relevant studies.Study Selection Randomized clinical trials that assessed plant-based therapies and the presence of hot flashes, night sweats, and vaginal dryness.Data Extraction Data were extracted by 2 independent reviewers using a predesigned data collection form. Main Outcomes and Measures Hot flashes, night sweats, and vaginal dryness.Results In total, 62 studies were identified, including 6653 individual women. Use of phytoestrogens was associated with a decrease in the number of daily hot flashes (pooled mean difference of changes, −1.31 [95% CI, −2.02 to −0.61]) and vaginal dryness score (pooled mean difference of changes, −0.31 [95% CI, −0.52 to −0.10]) between the treatment groups but not in the number of night sweats (pooled mean difference of changes, −2.14 [95% CI, −5.57 to 1.29]). Individual phytoestrogen interventions such as dietary and supplemental soy isoflavones were associated with improvement in daily hot flashes (pooled mean difference of changes, −0.79 [−1.35 to −0.23]) and vaginal dryness score (pooled mean difference of changes, −0.26 [−0.48 to −0.04]). Several herbal remedies, but not Chinese medicinal herbs, were associated with an overall decrease in the frequency of vasomotor symptoms. There was substantial heterogeneity in quality across the available studies, and 46 (74%) of the included randomized clinical trials demonstrated a high risk of bias within 3 or more areas of study quality. Conclusions and Relevance This meta-analysis of clinical trials suggests that composite and specific phytoestrogen supplementations were associated with modest reductions in the frequency of hot flashes and vaginal dryness but no significant reduction in night sweats. However, because of general suboptimal quality and the heterogeneous nature of the

current evidence, further rigorous studies are needed to determine the association of plant-based and natural therapies with menopausal health.

Hansen, B. T., K. M. Sønderskov, et al. (2016). ***"Daylight savings time transitions and the incidence rate of unipolar depressive episodes."*** Epidemiology Publish Ahead of Print. http://journals.lww.com/epidem/Fulltext/publishahead/Daylight_savings_time_transitions_and_the.98946.aspx

BACKGROUND: Daylight savings time transitions affect approximately 1.6 billion people worldwide. Prior studies have documented associations between daylight savings time transitions and adverse health outcomes, but it remains unknown whether they also cause an increase in the incidence rate of depressive episodes. This seems likely because daylight savings time transitions affect circadian rhythms, which are implicated in the etiology of depressive disorder. Therefore, we investigated the effects of daylight savings time transitions on the incidence rate of unipolar depressive episodes. METHODS: Using time series intervention analysis of nationwide data from the Danish Psychiatric Central Research Register from 1995 to 2012 we compared the observed trend in the incidence rate of hospital contacts for unipolar depressive episodes after the transitions to and from summer time to the predicted trend in the incidence rate. RESULTS: The analyses were based on 185.419 hospital contacts for unipolar depression and showed that the transition from summer time to standard time were associated with an 11% increase (95% CI: 7%, 15%) in the incidence rate of unipolar depressive episodes that dissipated over approximately 10 weeks. The transition from standard time to summer time was not associated with a parallel change in the incidence rate of unipolar depressive episodes. CONCLUSION: This study shows that the transition from summer time to standard time was associated with an increase in the incidence rate of unipolar depressive episodes. Distress associated with the sudden advancement of sunset, marking the coming of a long period of short days, may explain this finding.

Hopfinger, L., M. Berking, et al. (2016). ***"Emotion regulation mediates the effect of childhood trauma on depression."*** Journal of Affective Disorders 198: 189-197. http://www.sciencedirect.com/science/article/pii/S0165032715312544

Background Childhood trauma increases the risks of both depression and dysfunctional emotion regulation, which is a factor that has been strongly linked to depression. Because of these demonstrated relationships, it can be hypothesized that dysfunctional emotion regulation is a mediator of the association between childhood trauma and depression. Methods To test this hypothesis, we assessed the indirect effect of emotion regulation (Emotion Regulation Skills Questionnaire) on the relationship between childhood trauma (Childhood Trauma Questionnaire) and depression severity (24-item Hamilton Rating Scale for Depression) as well as depression lifetime persistency (i.e., lifetime percentage spent in major depressive episodes; assessed via SCID and Life Chart Interviews) in 269 patients with major depressive disorder (MDD). Results Bootstrapping-enhanced mediation analyses indicated that deficits in general emotion regulation mediated the association of childhood trauma to both depression severity and depression lifetime persistency. Further exploratory analyses indicated that specific emotion regulation skills (such as the ability to mindfully observe, accept, and tolerate undesired emotions or the willingness to voluntarily confront situations that prompt negative emotions in order to attain personally relevant goals) significantly mediated the association between childhood trauma and depression severity. Willingness to confront was a mediator for both depression outcomes (depression severity and lifetime persistency). Limitations The employed mediation analyses are cross-sectional in nature, which limits any firm conclusions regarding causality. Conclusions The findings support the assumption that a sophisticated emotion regulation may help prevent the onset or unfavorable course of depression in individuals who have experienced childhood trauma.

Hyde, L. W., R. Waller, et al. (2016). ***"Heritable and nonheritable pathways to early callous-unemotional behaviors."*** American Journal of Psychiatry 173(9): 903-910. http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2016.15111381

Objective: Callous-unemotional behaviors in early childhood signal higher risk for trajectories of antisocial behavior and callous-unemotional traits that culminate in later diagnoses of conduct disorder, antisocial personality disorder, and psychopathy. Studies demonstrate high heritability of callous-unemotional traits, but little research has examined specific heritable pathways to early callous-unemotional behaviors. Studies also indicate that positive parenting protects against the development of callous-unemotional traits, but genetically informed designs have not been used to confirm that these relationships are not the product of gene-environment correlations. In a sample of adopted children and their biological and adoptive mothers, the authors tested novel heritable and nonheritable pathways to preschool callous-unemotional behaviors. Method: In an adoption cohort of 561 families, history of severe antisocial behavior assessed in biological mothers and observations of adoptive mother positive reinforcement at 18 months were examined as predictors of callous-unemotional behaviors at 27 months. Results: Despite limited or no contact with offspring, biological mother antisocial behavior predicted early callous-unemotional behaviors. Adoptive mother positive reinforcement protected against early callous-unemotional behaviors. High levels of adoptive mother positive reinforcement buffered the effects of heritable risk for callous-unemotional behaviors posed by biological mother antisocial behavior. Conclusions: The findings elucidate heritable and nonheritable pathways to early callous-unemotional behaviors. The results provide a specific heritable pathway to callous-unemotional behaviors and compelling evidence that parenting is an important nonheritable factor in the development of callous-unemotional behaviors. The finding that positive reinforcement buffered heritable risk for callous-unemotional behaviors has important translational implications for the prevention of trajectories to serious antisocial behavior.

Ierodiakonou, D., V. Garcia-Larsen, et al. (2016). ***"Timing of allergenic food introduction to the infant diet and risk of allergic or autoimmune disease: A systematic review and meta-analysis."*** JAMA 316(11): 1181-1192. http://dx.doi.org/10.1001/jama.2016.12623

Importance Timing of introduction of allergenic foods to the infant diet may influence the risk of allergic or autoimmune disease, but the evidence for this has not been comprehensively synthesized.Objective To systematically review and meta-analyze evidence that timing of allergenic food introduction during infancy influences risk of allergic or autoimmune disease. Data Sources MEDLINE, EMBASE, Web of Science, CENTRAL, and LILACS databases were searched between January 1946 and March 2016.Study Selection Intervention trials and observational studies that evaluated timing of allergenic food introduction during the first year of life and reported allergic or autoimmune disease or allergic sensitization were included. Data Extraction and Synthesis Data were extracted in duplicate and synthesized for meta-analysis using generic inverse variance or Mantel-Haenszel methods with a random-effects model. GRADE was used to assess the certainty of evidence. Main Outcomes and Measures Wheeze, eczema, allergic rhinitis, food allergy, allergic sensitization, type 1 diabetes mellitus, celiac disease, inflammatory bowel disease, autoimmune thyroid disease, and juvenile rheumatoid arthritis.Results Of 16 289 original titles screened, data were extracted from 204 titles reporting 146 studies. There was moderate-certainty evidence from 5 trials (1915 participants) that early egg introduction at 4 to 6 months was associated with reduced egg allergy (risk ratio [RR], 0.56; 95% CI, 0.36-0.87; I2 = 36%; P = .009). Absolute risk reduction for a population with 5.4% incidence of egg allergy was 24 cases (95% CI, 7-35 cases) per 1000 population. There was moderate-certainty evidence from 2 trials (1550 participants) that early peanut introduction at 4 to 11 months was associated with reduced peanut allergy (RR, 0.29; 95% CI, 0.11-0.74; I2 = 66%; P = .009). Absolute risk reduction for a population with 2.5% incidence of peanut allergy was 18 cases (95% CI, 6-22

cases) per 1000 population. Certainty of evidence was downgraded because of imprecision of effect estimates and indirectness of the populations and interventions studied. Timing of egg or peanut introduction was not associated with risk of allergy to other foods. There was low- to very low-certainty evidence that early fish introduction was associated with reduced allergic sensitization and rhinitis. There was high-certainty evidence that timing of gluten introduction was not associated with celiac disease risk, and timing of allergenic food introduction was not associated with other outcomes. Conclusions and Relevance In this systematic review, early egg or peanut introduction to the infant diet was associated with lower risk of developing egg or peanut allergy. These findings must be considered in the context of limitations in the primary studies.

Jakubiak, B. K. and B. C. Feeney (2016). ***"Daily goal progress is facilitated by spousal support and promotes psychological, physical, and relational well-being throughout adulthood."*** Journal of Personality and Social Psychology 111(3): 317-340. http://psycnet.apa.org/journals/psp/111/3/317/

In 2 daily diary studies, we tested the consequences and precursors of daily goal progress throughout the adult life span. Attachment theory posits that exploration—including the pursuit of autonomous goals—promotes well-being across the life span and is facilitated by support from close others. For both young-adult newlyweds (Study 1) and married couples in late adulthood (Study 2), daily independent goal progress predicted same-day and next-day improvements in psychological, physical, and relational well-being. Specifically, when participants made more progress on their goals than usual on one day, they reported increases in positive affect, sleep quality, and relationship quality, and decreased physical symptoms, the following day (as well as concurrently). Additionally, spousal support (i.e., availability, encouragement, and noninterference) enabled same-day and next-day goal progress. Mediational analyses showed indirect links between spousal support and well-being through goal progress. Some effects were moderated by attachment orientation in the newlywed sample; individuals with greater insecure attachment benefited most from goal progress, and spousal support enabled goal progress most strongly for individuals with less anxious attachment. Overall, these results support and extend attachment theoretical propositions regarding the importance of the exploration system across the adult life span. They contribute to existing literature by demonstrating wide-ranging consequences of successful exploration for well-being and by providing evidence for the importance of both exploration and support for exploration into late adulthood.

Jensen, P., R. Christensen, et al. (2016). ***"Long-term effects of weight reduction on the severity of psoriasis in a cohort derived from a randomized trial: A prospective observational follow-up study."*** The American Journal of Clinical Nutrition 104(2): 259-265. http://ajcn.nutrition.org/content/104/2/259.abstract

Background: Weight reduction may reduce the severity of psoriasis, but little is known about the long-term effects. Objective: We aimed to investigate long-term effects of weight reduction in psoriasis. Design: We previously conducted a randomized trial (n = 60) involving patients with psoriasis who were allocated to a control group or a low-energy diet (LED) group. Here we followed the participants for an additional 48-wk period. In total, 56 patients with psoriasis [mean ± SD body mass index (in kg/m2): 34.4 ± 5.3] underwent a 64-wk weight-loss program consisting of an initial 16-wk randomized phase with an LED for 8 wk and 8 wk of normal food intake combined with 2 LED products/d, followed by a 48-wk period of weight maintenance with the latter diet. After the randomization phase, the control group received the same 8 + 8-wk LED intervention, and all patients were then followed for 48 wk while on the weight-loss maintenance diet. The main outcome was the Psoriasis Area and Severity Index (PASI), and secondary outcome was the Dermatology Life Quality Index (DLQI). Results: For the present study, 56 patients were eligible, 38 agreed to participate, and 32 completed. After the 16-wk LED-only period, the mean weight loss was −15.0 kg (95% CI: −16.6, −13.4 kg), and PASI and DLQI were reduced by −2.3 (95% CI: −3.1, −1.5) and −2.3 (95% CI: −3.2, −1.4), respectively. At week 64, the mean weight loss compared with baseline was −10.1 kg (95% CI: −12.0, −8.1 kg), and PASI and DLQI were maintained at −2.9 (95% CI: −3.9, −1.9) and −1.9 (95% CI: −3.0, −0.9), respectively. Conclusion: Long-term weight loss in patients with psoriasis has long-lasting positive effects on the severity of psoriasis.

Kendler, K. S., S. L. Lönn, et al. (2016). ***"Effect of marriage on risk for onset of alcohol use disorder: A longitudinal and co-relative analysis in a swedish national sample."*** American Journal of Psychiatry 173(9): 911-918. http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2016.15111373

Objective: The authors sought to clarify the relationship between marriage and risk for alcohol use disorder. Method: The association between marital status and risk for first registration for alcohol use disorder in medical, criminal, and pharmacy registries was assessed in a population-based Swedish cohort (N=3,220,628) using longitudinal time-dependent survival and co-relative designs. Results: First marriage was associated with a substantial decline in risk for onset of alcohol use disorder in men (hazard ratio=0.41, 95% CI=0.40–0.42) and women (hazard ratio=0.27, 95% CI=0.26–0.28). This association was slightly stronger when the spouse had no lifetime alcohol use disorder, while marriage to a spouse with lifetime alcohol use disorder increased risk for subsequent alcohol use disorder registration in both men (hazard ratio=1.29, 95% CI=1.16–1.43) and women (hazard ratio=1.18, 95% CI=1.06–1.30). In both sexes, the protective effect of marriage was significantly stronger in those with than those without a family history of alcohol use disorder. In both men and women, the associations between marriage and risk for alcohol use disorder in cousins, half siblings, full siblings, and monozygotic twins discordant for marital status were as strong as that seen in the general population. Conclusions: First marriage to a spouse with no lifetime alcohol use disorder is associated with a large reduction in risk for alcohol use disorder. This association cannot be explained by standard covariates or, as indicated by co-relative analyses, familial genetic or shared environmental confounders. These results are consistent with the hypothesis that the psychological and social aspects of marriage, and in particular health-monitoring spousal interactions, strongly protect against the development of alcohol use disorder. The protective effects of marriage on risk for alcohol use disorder are increased in those at high familial risk for alcoholism.

Khera, R., M. Murad, et al. (2016). ***"Association of pharmacological treatments for obesity with weight loss and adverse events: A systematic review and meta-analysis."*** JAMA 315(22): 2424-2434. http://dx.doi.org/10.1001/jama.2016.7602

Importance Five medications have been approved for the management of obesity, but data on comparative effectiveness are limited. Objective To compare weight loss and adverse events among drug treatments for obesity using a systematic review and network meta-analysis.Data Sources MEDLINE, EMBASE, Web of Science, Scopus, and Cochrane Central from inception to March 23, 2016; clinical trial registries.Study Selection Randomized clinical trials conducted among overweight and obese adults treated with US Food and Drug Administration–approved long-term weight loss agents (orlistat, lorcaserin, naltrexone-bupropion, phentermine-topiramate, or liraglutide) for at least 1 year compared with another active agent or placebo. Data Extraction and Synthesis Two investigators identified studies and independently abstracted data using a predefined protocol. A Bayesian network meta-analysis was performed and relative ranking of agents was assessed using surface under the cumulative ranking (SUCRA) probabilities. Quality of evidence was assessed using GRADE criteria. Main Outcomes and Measures Proportions of patients with at least 5% weight loss and at least 10% weight loss, magnitude of decrease in weight, and discontinuation of therapy because of adverse events at 1 year.Results Twenty-eight randomized

clinical trials with 29 018 patients (median age, 46 years; 74% women; median baseline body weight, 100.5 kg; median baseline body mass index, 36.1) were included. A median 23% of placebo participants had at least 5% weight loss vs 75% of participants taking phentermine-topiramate (odds ratio [OR], 9.22; 95% credible interval [CrI], 6.63-12.85; SUCRA, 0.95), 63% of participants taking liraglutide (OR, 5.54; 95% CrI, 4.16-7.78; SUCRA, 0.83), 55% taking naltrexone-bupropion (OR, 3.96; 95% CrI, 3.03-5.11; SUCRA, 0.60), 49% taking lorcaserin (OR, 3.10; 95% CrI, 2.38-4.05; SUCRA, 0.39), and 44% taking orlistat (OR, 2.70; 95% CrI, 2.34-3.09; SUCRA, 0.22). All active agents were associated with significant excess weight loss compared with placebo at 1 year—phentermine-topiramate, 8.8 kg (95% CrI, −10.20 to −7.42 kg); liraglutide, 5.3 kg (95% CrI, −6.06 to −4.52 kg); naltrexone-bupropion, 5.0 kg (95% CrI, −5.94 to −3.96 kg); lorcaserin, 3.2 kg (95% CrI, −3.97 to −2.46 kg); and orlistat, 2.6 kg (95% CrI, −3.04 to −2.16 kg). Compared with placebo, liraglutide (OR, 2.95; 95% CrI, 2.11-4.23) and naltrexone-bupropion (OR, 2.64; 95% CrI, 2.10-3.35) were associated with the highest odds of adverse event–related treatment discontinuation. High attrition rates (30%-45% in all trials) were associated with lower confidence in estimates. Conclusions and Relevance Among overweight or obese adults, orlistat, lorcaserin, naltrexone-bupropion, phentermine-topiramate, and liraglutide, compared with placebo, were each associated with achieving at least 5% weight loss at 52 weeks. Phentermine-topiramate and liraglutide were associated with the highest odds of achieving at least 5% weight loss.

Knudsen, A. B., A. G. Zauber, et al. (2016). ***"Estimation of benefits, burden, and harms of colorectal cancer screening strategies: Modeling study for the us preventive services task force."*** JAMA 315(23): 2595-2609. http://dx.doi.org/10.1001/jama.2016.6828

(Available in free full text) Importance The US Preventive Services Task Force (USPSTF) is updating its 2008 colorectal cancer (CRC) screening recommendations. Objective To inform the USPSTF by modeling the benefits, burden, and harms of CRC screening strategies; estimating the optimal ages to begin and end screening; and identifying a set of model-recommendable strategies that provide similar life-years gained (LYG) and a comparable balance between LYG and screening burden. Design, Setting, and Participants Comparative modeling with 3 microsimulation models of a hypothetical cohort of previously unscreened US 40-year-olds with no prior CRC diagnosis.Exposures Screening with sensitive guaiac-based fecal occult blood testing, fecal immunochemical testing (FIT), multitarget stool DNA testing, flexible sigmoidoscopy with or without stool testing, computed tomographic colonography (CTC), or colonoscopy starting at age 45, 50, or 55 years and ending at age 75, 80, or 85 years. Screening intervals varied by modality. Full adherence for all strategies was assumed. Main Outcomes and Measures Life-years gained compared with no screening (benefit), lifetime number of colonoscopies required (burden), lifetime number of colonoscopy complications (harms), and ratios of incremental burden and benefit (efficiency ratios) per 1000 40-year-olds.Results The screening strategies provided LYG in the range of 152 to 313 per 1000 40-year-olds. Lifetime colonoscopy burden per 1000 persons ranged from fewer than 900 (FIT every 3 years from ages 55-75 years) to more than 7500 (colonoscopy screening every 5 years from ages 45-85 years). Harm from screening was at most 23 complications per 1000 persons screened. Strategies with screening beginning at age 50 years generally provided more LYG as well as more additional LYG per additional colonoscopy than strategies with screening beginning at age 55 years. There were limited empirical data to support a start age of 45 years. For persons adequately screened up to age 75 years, additional screening yielded small increases in LYG relative to the increase in colonoscopy burden. With screening from ages 50 to 75 years, 4 strategies yielded a comparable balance of screening burden and similar LYG (median LYG per 1000 across the models): colonoscopy every 10 years (270 LYG); sigmoidoscopy every 10 years with annual FIT (256 LYG); CTC every 5 years (248 LYG); and annual FIT (244 LYG). Conclusions and Relevance In this microsimulation modeling study of a previously unscreened population undergoing CRC screening that assumed 100% adherence, the strategies of colonoscopy every 10 years, annual FIT, sigmoidoscopy every 10 years with annual FIT, and CTC every 5 years performed from ages 50 through 75 years provided similar LYG and a comparable balance of benefit and screening burden.

Koukouna, D., L. Bossini, et al. (2016). ***Light therapy as a treatment for sexual dysfunction; focus on testosterone levels***. 29th European College of Neuropsychopharmacology (ECNP) Congress Vienna. http://www.ecnp-congress.eu/programme/AbstractList.aspx#

Seasonality has shown to have a significant influence on sexual function and the pineal gland plays a key role in the neuroendocrine control of sexual activity. The retinohypothalamic tract carries information on the cycles light/dark to the suprachiasmatic nucleus of the hypothalamus that projects to the pineal gland and inhibits the production of melatonin [1]. When these impulses stop (at night, when light no longer stimulates the hypothalamus), pineal inhibition ceases and melatonin is released. Melatonin increases the secretion of prolactin, which contributes to sexual dysfunction. We aimed at demostrating that inhibition of the pineal gland activity through a light treatment may favorably affect sexual function reducing plasma levels of melatonin. We recruited a sample of 38 male subjects among outpatients referred to the Urology Department of the University of Siena on the basis of a diagnosis of primary hypoactive sexual desire disorder (HSDD) and sexual arousal disorder (SAD). Participants were randomly assigned to active light treatment (ALT) or placebo light treatment (L-PBO) and assessed before and after 2 weeks of treatment ALT/L-PBO via the Structured Clinical Interview for DSM-IV sexual disorders (SCID-d) and self-administered rating scale of the level of sexual satisfaction (1 to 10); testosterone levels were also assessed at baseline and after two weeks of treatment through blood samples. The ALT consisted of daily exposure to a white fluorescent light box (Super-Lite 3S), fitted with an ultraviolet filter and rated at 10,000 lx at a distance of 1 meter from screen to cornea for 30 min as soon as possible after awakening, between 7.00 a.m. and 8.00 a.m. The L-PBO was an identical light box fitted with a neutral density gel filter to reduce light exposure to 100 lx. The Mann–Whitney test for nonparametric data has been applied to analyze the differences between the ALT and L-PBO group at the time of recruitment and after 2 weeks of therapy. At baseline the two groups were clinically comparable; results after 2 weeks of therapy showed a significant improvement in sexual satisfaction in the group treated with ALT approximately 3 times higher than the group that received the placebo ($p < 0.05$), while no significant improvement was observed in the group L-PBO. Testosterone levels (range 2.7–10.9 ng/ml) at baseline were 2.1±1.3 ng/ml in ALT and 2.3±0.6 ng/ml in L-PBO group; after two weeks they raised at 3.6±1.1 ng/ml in ALT group ($p < 0.05$) while no significant difference emerged in L-PBO group. Our results suggest that the level of sexual satisfaction at baseline was roughly comparable in the two groups, with no statistically significant differences. After 2 weeks of treatment the group that received ALT showed a significant improvement in sexual function with respect to baseline level, about 3 times higher than the group that received L-PBO. This difference could also be attributed to increased levels of testosterone in subjects treated with active light therapy. [Medscape comment: Study investigator Andrea Fagiolini, MD, chairman, Division of Psychiatry, University of Siena School of Medicine, Italy, told Medscape Medical News that "Although it cannot be said at this time that light therapy will replace Viagra, we did see a very strong effect." The investigators plan to repeat the study with larger numbers of patients. "The good thing is that it's basically safe. Unless people have some eye problems, it's really unlikely that this gives problems, whereas any medication has much more problems in terms of side effects and dangerous interactions with other medications," he said. "Even if I would recommend not to use it until we have results from larger trials, if somebody wants to use it, it's not going to give too many problems, because it is a treatment that is already used for another disorder, and we know it's pretty safe," Dr Fagiolini added ... After 2 weeks of therapy, individuals who received active light treatment had experienced significant

improvements in sexual satisfaction compared with those receiving placebo light treatment (P < .05) ... "The increased levels of testosterone explain the greater reported sexual satisfaction. In the Northern hemisphere, the body's testosterone production naturally declines from November through April and then rises steadily through the spring and summer, with a peak in October," said Dr Fagiolini. "You see the effect of this in reproductive rates, with the month of June showing the highest rate of conception. The use of the light box really mimics what nature does. We believe that there may be several explanations to explain the underlying mechanism. For instance, light therapy inhibits the pineal gland in the center of the brain, and this may allow the production of more testosterone, and there are probably other hormonal effects." Cautionary Note: Commenting on the findings, Eduard Vieta, MD, PhD, chair of the Department of Psychiatry and Psychology at the University of Barcelona Hospital Clinic, Spain, who is treasurer of the ECNP, commented that "light therapy has been used successfully in the past to treat some forms of depression, and this study suggests now that it may also work to treat low sexual desire in men. The mechanism of action appears to be related to the increase of testosterone levels," he said. However, Dr Vieta sounded a note of caution over its use at this stage for the treatment of low sexual desire. "Before this kind of treatment, which is likely to be better tolerated than pharmacological therapy, gets ready for routine use, there are many steps to be implemented, including replication of the results in a larger, independent study and verifying whether the results are long-lasting and not just short-term," he said.]

Lemay, E. P. (2016). ***"The forecast model of relationship commitment."*** J Pers Soc Psychol 111(1): 34-52. http://www.ncbi.nlm.nih.gov/pubmed/27183320

Four studies tested the forecast model of relationship commitment, which posits that forecasts of future relationship satisfaction determine relationship commitment and prorelationship behavior in romantic relationships independently of other known predictors and partially explain the effects of these other predictors. This model was supported in 2 cross-sectional studies, a daily report study, and a study using behavioral observation, informant, and longitudinal methods. Across these studies, forecasts of future relationship satisfaction predicted relationship commitment and prorelationship behavior during relationship conflict and partially explained the effects of relationship satisfaction, quality of alternatives, and investment size. These results suggest that representations of the future have a prominent role in interpersonal processes.

Li, F.-D., F. He, et al. (2016). ***"Tea consumption is inversely associated with depressive symptoms in the elderly: A cross-sectional study in eastern china."*** Journal of Affective Disorders 199: 157-162. http://www.sciencedirect.com/science/article/pii/S0165032716300039

Abstract Background Epidemiological studies suggest that higher tea consumption was associated with lower risk of depressive symptoms, but this has not been found consistently. Moreover, the effect of different types of tea on depressive symptoms needs to be further explored. This study aimed to examine the association between tea consumption and depressive symptoms in Chinese elderly. Methods We analyzed the baseline data from Zhejiang Major Public Health Surveillance Program including 9371 participants. Depressive symptoms was assessed through the application of Patient Health Questionnaire-9 scale (PHQ-9). Logistic regression models, controlled for an extensive range of potential confounders, were generated to evaluate the association between tea consumption and risk of depressive symptoms. Results The black tea drinkers had a significantly decreased risk of depressive symptoms ($p<0.01$), whereas no association was found in green tea drinkers. Compared with non-drinkers, the adjusted ORs (95% CIs) were 0.48 (0.23, 0.99) and 0.35 (0.17, 0.72) for participants consuming <3 cups and ≥3 cups of black tea per day, respectively (P for trend: <0.01). A linear association between concentration of black tea and depressive symptoms was also confirmed in our study. Limitations Cross-sectional data could not make a causation conclusion, and the observed association in our study could not be ascribed to any specific component in tea. Conclusions Our results indicated that higher black tea consumption was associated with a lower prevalence of depressive symptoms in the elderly.

Lin, J. S., M. A. Piper, et al. (2016). ***"Screening for colorectal cancer: Updated evidence report and systematic review for the US preventive services task force."*** JAMA 315(23): 2576-2594. http://dx.doi.org/10.1001/jama.2016.3332

(Available in free full text) Importance Colorectal cancer (CRC) remains a significant cause of morbidity and mortality in the United States. Objective To systematically review the effectiveness, diagnostic accuracy, and harms of screening for CRC.Data Sources Searches of MEDLINE, PubMed, and the Cochrane Central Register of Controlled Trials for relevant studies published from January 1, 2008, through December 31, 2014, with surveillance through February 23, 2016.Study Selection English-language studies conducted in asymptomatic populations at general risk of CRC.Data Extraction and Synthesis Two reviewers independently appraised the articles and extracted relevant study data from fair- or good-quality studies. Random-effects meta-analyses were conducted. Main Outcomes and Measures Colorectal cancer incidence and mortality, test accuracy in detecting CRC or adenomas, and serious adverse events.Results Four pragmatic randomized clinical trials (RCTs) evaluating 1-time or 2-time flexible sigmoidoscopy (n = 458 002) were associated with decreased CRC-specific mortality compared with no screening (incidence rate ratio, 0.73; 95% CI, 0.66-0.82). Five RCTs with multiple rounds of biennial screening with guaiac-based fecal occult blood testing (n = 419 966) showed reduced CRC-specific mortality (relative risk [RR], 0.91; 95% CI, 0.84-0.98, at 19.5 years to RR, 0.78; 95% CI, 0.65-0.93, at 30 years). Seven studies of computed tomographic colonography (CTC) with bowel preparation demonstrated per-person sensitivity and specificity to detect adenomas 6 mm and larger comparable with colonoscopy (sensitivity from 73% [95% CI, 58%-84%] to 98% [95% CI, 91%-100%]; specificity from 89% [95% CI, 84%-93%] to 91% [95% CI, 88%-93%]); variability and imprecision may be due to differences in study designs or CTC protocols. Sensitivity of colonoscopy to detect adenomas 6 mm or larger ranged from 75% (95% CI, 63%-84%) to 93% (95% CI, 88%-96%). On the basis of a single stool specimen, the most commonly evaluated families of fecal immunochemical tests (FITs) demonstrated good sensitivity (range, 73%-88%) and specificity (range, 90%-96%). One study (n = 9989) found that FIT plus stool DNA test had better sensitivity in detecting CRC than FIT alone (92%) but lower specificity (84%). Serious adverse events from colonoscopy in asymptomatic persons included perforations (4/10 000 procedures, 95% CI, 2-5 in 10 000) and major bleeds (8/10 000 procedures, 95% CI, 5-14 in 10 000). Computed tomographic colonography may have harms resulting from low-dose ionizing radiation exposure or identification of extracolonic findings. Conclusions and Relevance Colonoscopy, flexible sigmoidoscopy, CTC, and stool tests have differing levels of evidence to support their use, ability to detect cancer and precursor lesions, and risk of serious adverse events in average-risk adults. Although CRC screening has a large body of supporting evidence, additional research is still needed.

Linde, K., G. Allais, et al. (2016). ***"Acupuncture for the prevention of episodic migraine."*** Cochrane Database of Systematic Reviews(6). http://dx.doi.org/10.1002/14651858.CD001218.pub3

(Available in free full text) Background: Acupuncture is often used for migraine prevention but its effectiveness is still controversial. We present an update of our Cochrane review from 2009. Objectives: To investigate whether acupuncture is a) more effective than no prophylactic treatment/routine care only; b) more effective than sham (placebo) acupuncture; and c) as effective as prophylactic treatment with drugs in reducing headache frequency in adults with episodic migraine. Search methods: We searched the Cochrane Central Register of Controlled Trials (CENTRAL: 2016, issue 1); MEDLINE (via Ovid, 2008

to January 2016); Ovid EMBASE (2008 to January 2016); and Ovid AMED (1985 to January 2016). We checked PubMed for recent publications to April 2016. We searched the World Health Organization (WHO) Clinical Trials Registry Platform to February 2016 for ongoing and unpublished trials. Selection criteria: We included randomized trials at least eight weeks in duration that compared an acupuncture intervention with a no-acupuncture control (no prophylactic treatment or routine care only), a sham-acupuncture intervention, or prophylactic drug in participants with episodic migraine. Data collection and analysis: Two reviewers checked eligibility; extracted information on participants, interventions, methods and results, and assessed risk of bias and quality of the acupuncture intervention. The primary outcome was migraine frequency (preferably migraine days, attacks or headache days if migraine days not measured/reported) after treatment and at follow-up. The secondary outcome was response (at least 50% frequency reduction). Safety outcomes were number of participants dropping out due to adverse effects and number of participants reporting at least one adverse effect. We calculated pooled effect size estimates using a fixed-effect model. We assessed the evidence using GRADE and created 'Summary of findings' tables. Main results: Twenty-two trials including 4985 participants in total (median 71, range 30 to 1715) met our updated selection criteria. We excluded five previously included trials from this update because they included people who had had migraine for less than 12 months, and included five new trials. Five trials had a no-acupuncture control group (either treatment of attacks only or non-regulated routine care), 15 a sham-acupuncture control group, and five a comparator group receiving prophylactic drug treatment. In comparisons with no-acupuncture control groups and groups receiving prophylactic drug treatment, there was risk of performance and detection bias as blinding was not possible. Overall the quality of the evidence was moderate. Comparison with no acupuncture Acupuncture was associated with a moderate reduction of headache frequency over no acupuncture after treatment (four trials, 2199 participants; standardised mean difference (SMD) -0.56; 95% CI -0.65 to -0.48); findings were statistically heterogeneous (I^2 = 57%; moderate quality evidence). After treatment headache frequency at least halved in 41% of participants receiving acupuncture and 17% receiving no acupuncture (pooled risk ratio (RR) 2.40; 95% CI 2.08 to 2.76; 4 studies, 2519 participants) with a corresponding number needed to treat for an additional beneficial outcome (NNTB) of 4 (95% CI 3 to 6); there was no indication of statistical heterogeneity (I^2 = 7%; moderate quality evidence). The only trial with post-treatment follow-up found a small but significant benefit 12 months after randomisation (RR 2.16; 95% CI 1.35 to 3.45; NNT 7; 95% 4 to 25; 377 participants, low quality evidence). Comparison with sham acupuncture Both after treatment (12 trials, 1646 participants) and at follow-up (10 trials, 1534 participants), acupuncture was associated with a small but statistically significant frequency reduction over sham (moderate quality evidence). The SMD was -0.18 (95% CI -0.28 to -0.08; I^2 = 47%) after treatment and -0.19 (95% CI -0.30 to -0.09; I^2 = 59%) at follow-up. After treatment headache frequency at least halved in 50% of participants receiving true acupuncture and 41% receiving sham acupuncture (pooled RR 1.23, 95% CI 1.11 to 1.36; I^2 = 48%; 14 trials, 1825 participants) and at follow-up in 53% and 42%, respectively (pooled RR 1.25, 95% CI 1.13 to 1.39; I^2 = 61%; 11 trials, 1683 participants; moderate quality evidence). The corresponding NNTBs are 11 (95% CI 7.00 to 20.00) and 10 (95% CI 6.00 to 18.00), respectively. The number of participants dropping out due to adverse effects (odds ratio (OR) 2.84; 95% CI 0.43 to 18.71; 7 trials, 931 participants; low quality evidence) and the number of participants reporting adverse effects (OR 1.15; 95% CI 0.85 to 1.56; 4 trials, 1414 participants; moderate quality evidence) did not differ significantly between acupuncture and sham groups. Comparison with prophylactic drug treatment Acupuncture reduced migraine frequency significantly more than drug prophylaxis after treatment (SMD -0.25; 95% CI -0.39 to -0.10; 3 trials, 739 participants), but the significance was not maintained at follow-up (SMD -0.13; 95% CI -0.28 to 0.01; 3 trials, 744 participants; moderate quality evidence). After three months headache frequency at least halved in 57% of participants receiving acupuncture and 46% receiving prophylactic drugs (pooled RR 1.24; 95% CI 1.08 to 1.44) and after six months in 59% and 54%, respectively (pooled RR 1.11; 95% CI 0.97 to 1.26; moderate quality evidence). Findings were consistent among trials with I^2 being 0% in all analyses. Trial participants receiving acupuncture were less likely to drop out due to adverse effects (OR 0.27; 95% CI 0.08 to 0.86; 4 trials, 451 participants) and to report adverse effects (OR 0.25; 95% CI 0.10 to 0.62; 5 trials 931 participants) than participants receiving prophylactic drugs (moderate quality evidence). Authors' conclusions: The available evidence suggests that adding acupuncture to symptomatic treatment of attacks reduces the frequency of headaches. Contrary to the previous findings, the updated evidence also suggests that there is an effect over sham, but this effect is small. The available trials also suggest that acupuncture may be at least similarly effective as treatment with prophylactic drugs. Acupuncture can be considered a treatment option for patients willing to undergo this treatment. As for other migraine treatments, long-term studies, more than one year in duration, are lacking.

Mac Carron, P., K. Kaski, et al. (2016). ***"Calling Dunbar's numbers."*** Social Networks 47: 151-155. http://www.sciencedirect.com/science/article/pii/S0378873316301095

(Available in free full text) The social brain hypothesis predicts that humans have an average of about 150 relationships at any given time. Within this 150, there are layers of friends of an ego, where the number of friends in a layer increases as the emotional closeness decreases. Here we analyse a mobile phone dataset, firstly, to ascertain whether layers of friends can be identified based on call frequency. We then apply different clustering algorithms to break the call frequency of egos into clusters and compare the number of alters in each cluster with the layer size predicted by the social brain hypothesis. In this dataset we find strong evidence for the existence of a layered structure. The clustering yields results that match well with previous studies for the innermost and outermost layers, but for layers in between we observe large variability.

Martineau, A. R., C. J. Cates, et al. (2016). ***"Vitamin d for the management of asthma."*** Cochrane Database of Systematic Reviews(9). http://dx.doi.org/10.1002/14651858.CD011511.pub2

Background: Several clinical trials of vitamin D to prevent asthma exacerbation and improve asthma control have been conducted in children and adults, but a meta-analysis restricted to double-blind, randomised, placebo-controlled trials of this intervention is lacking. Objectives: To evaluate the efficacy of administration of vitamin D and its hydroxylated metabolites in reducing the risk of severe asthma exacerbations (defined as those requiring treatment with systemic corticosteroids) and improving asthma symptom control. Search methods: We searched the Cochrane Airways Group Trial Register and reference lists of articles. We contacted the authors of studies in order to identify additional trials. Date of last search: January 2016. Selection criteria: Double-blind, randomised, placebo-controlled trials of vitamin D in children and adults with asthma evaluating exacerbation risk or asthma symptom control or both. Data collection and analysis: Two review authors independently applied study inclusion criteria, extracted the data, and assessed risk of bias. We obtained missing data from the authors where possible. We reported results with 95% confidence intervals (CIs). Main results: We included seven trials involving a total of 435 children and two trials involving a total of 658 adults in the primary analysis. Of these, one trial involving 22 children and two trials involving 658 adults contributed to the analysis of the rate of exacerbations requiring systemic corticosteroids. Duration of trials ranged from four to 12 months, and the majority of participants had mild to moderate asthma. Administration of vitamin D reduced the rate of exacerbations requiring systemic corticosteroids (rate ratio 0.63, 95% CI 0.45 to 0.88; 680 participants; 3 studies; high-quality evidence), and decreased the risk of having at least one exacerbation requiring an emergency department visit or hospitalisation or both (odds ratio (OR) 0.39, 95% CI 0.19 to 0.78; number needed to treat for an additional beneficial outcome, 27; 963 participants; 7 studies; high-quality evidence). There was no effect of vitamin D on % predicted forced expiratory volume in one second (mean difference (MD) 0.48, 95% CI -0.93 to 1.89; 387 participants; 4 studies; high-quality

evidence) or Asthma Control Test scores (MD -0.08, 95% CI -0.70 to 0.54; 713 participants; 3 studies; high-quality evidence). Administration of vitamin D did not influence the risk of serious adverse events (OR 1.01, 95% CI 0.54 to 1.89; 879 participants; 5 studies; moderate-quality evidence). One trial comparing low-dose versus high-dose vitamin D reported two episodes of hypercalciuria, one in each study arm. No other study reported any adverse event potentially attributable to administration of vitamin D. No participant in any included trial suffered a fatal asthma exacerbation. We did not perform a subgroup analysis to determine whether the effect of vitamin D on risk of severe exacerbation was modified by baseline vitamin D status, due to unavailability of suitably disaggregated data. We assessed two trials as being at high risk of bias in at least one domain; neither trial contributed data to the analysis of the outcomes reported above. Authors' conclusions: Meta-analysis of a modest number of trials in people with predominantly mild to moderate asthma suggests that vitamin D is likely to reduce both the risk of severe asthma exacerbation and healthcare use. It is as yet unclear whether these effects are confined to people with lower baseline vitamin D status; further research, including individual patient data meta-analysis of existing datasets, is needed to clarify this issue. Children and people with frequent severe asthma exacerbations were under-represented; additional primary trials are needed to establish whether vitamin D can reduce the risk of severe asthma exacerbation in these groups.

Meier, M. H., A. Caspi, et al. (2016). ***"Associations between cannabis use and physical health problems in early midlife: A longitudinal comparison of persistent cannabis vs tobacco users."*** JAMA Psychiatry 73(7): 731-740. http://dx.doi.org/10.1001/jamapsychiatry.2016.0637

Importance After major policy changes in the United States, policymakers, health care professionals, and the general public seek information about whether recreational cannabis use is associated with physical health problems later in life. Objective To test associations between cannabis use over 20 years and a variety of physical health indexes at early midlife. Design, Setting, and Participants Participants belonged to a representative birth cohort of 1037 individuals born in Dunedin, New Zealand, in 1972 and 1973 and followed to age 38 years, with 95% retention (the Dunedin Multidisciplinary Health and Development Study). We tested whether cannabis use from ages 18 to 38 years was associated with physical health at age 38, even after controlling for tobacco use, childhood health, and childhood socioeconomic status. We also tested whether cannabis use from ages 26 to 38 years was associated with within-individual health decline using the same measures of health at both ages. Exposures We assessed frequency of cannabis use and cannabis dependence at ages 18, 21, 26, 32, and 38 years.Main Outcomes and Measures We obtained laboratory measures of physical health (periodontal health, lung function, systemic inflammation, and metabolic health), as well as self-reported physical health, at ages 26 and 38 years.Results The 1037 study participants were 51.6% male (n = 535). Of these, 484 had ever used tobacco daily and 675 had ever used cannabis. Cannabis use was associated with poorer periodontal health at age 38 years and within-individual decline in periodontal health from ages 26 to 38 years. For example, cannabis joint-years from ages 18 to 38 years was associated with poorer periodontal health at age 38 years, even after controlling for tobacco pack-years (β = 0.12; 95% CI, 0.05-0.18; P <.001). Additionally, cannabis joint-years from ages 26 to 38 years was associated with poorer periodontal health at age 38 years, even after accounting for periodontal health at age 26 years and tobacco pack-years (β = 0.10; 95% CI, 0.05-0.16; P < .001) However, cannabis use was unrelated to other physical health problems. Unlike cannabis use, tobacco use was associated with worse lung function, systemic inflammation, and metabolic health at age 38 years, as well as within-individual decline in health from ages 26 to 38 years. Conclusions and Relevance Cannabis use for up to 20 years is associated with periodontal disease but is not associated with other physical health problems in early midlife.

Meltzer, A. L. and J. K. McNulty (2016). ***"Who is having more and better sex? The big five as predictors of sex in marriage."*** Journal of Research in Personality 63: 62-66. http://www.sciencedirect.com/science/article/pii/S0092656616300459

Prior research has been somewhat inconsistent in demonstrating links between personality and sexual functioning. We pooled the data from three independent daily-diary studies of newlywed couples to examine the association between individuals' Big Five traits and the probability of sex on a given day; we also pooled the data from the two studies that assessed satisfaction with sex to examine the association between these traits and individuals' satisfaction with sex when it occurred. Couples with wives high in agreeableness engaged in more frequent sex. Husbands low in openness or neuroticism and wives low in neuroticism reported increased satisfaction with sex when it occurred. Partner personality was unrelated to satisfaction with sex when it occurred.

Morawska, A., A. E. Mitchell, et al. (2016). ***"Effects of triple p parenting intervention on child health outcomes for childhood asthma and eczema: Randomised controlled trial."*** Behaviour Research and Therapy 83: 35-44. http://www.sciencedirect.com/science/article/pii/S0005796716300961

Childhood chronic health conditions have considerable impact on children. We aimed to test the efficacy of a brief, group-based parenting intervention for improving illness-related child behaviour problems, parents' self-efficacy, quality of life, parents' competence with treatment, and symptom severity. A 2 (intervention vs. care as usual) by 3 (baseline, post-intervention, 6-month follow-up) design was used, with random group assignment. Participants were 107 parents of 2- to 10-year-old children with asthma and/or eczema. Parents completed self-report questionnaires, symptom diaries, and home observations were completed. The intervention comprised two 2-h group discussions based on Triple P. Parents in the intervention group reported (i) fewer eczema-related, but not asthma-related, child behaviour problems; (ii) improved self-efficacy for managing eczema, but not asthma; (iii) better quality of life for parent and family, but not child; (iv) no change in parental treatment competence; (v) reduced symptom severity, particularly for children prescribed corticosteroid-based treatments. Results demonstrate the potential for brief parenting interventions to improve childhood chronic illness management, child health outcomes, and family wellbeing. Effects were stronger for eczema-specific outcomes compared to asthma-specific outcomes. Effects on symptom severity are very promising, and further research examining effects on objective disease severity and treatment adherence is warranted.

Niemelä, S., A. Sourander, et al. (2016). ***"Prenatal nicotine exposure and risk of schizophrenia among offspring in a national birth cohort."*** American Journal of Psychiatry 173(8): 799-806. http://ajp.psychiatryonline.org/doi/abs/10.1176/appi.ajp.2016.15060800

Objective: Cigarette smoking during pregnancy is a major public health problem leading to adverse health outcomes and neurodevelopmental abnormalities among offspring. Its prevalence in the United States and Europe is 12%–25%. This study examined the relationship between prenatal nicotine exposure (cotinine level) in archived maternal sera and schizophrenia in offspring from a national birth cohort.Method:The authors conducted a population-based nested case-control study of all live births in Finland from 1983 to 1998. Cases of schizophrenia in offspring (N=977) were identified from a national registry and matched 1:1 to controls on date of birth, sex, and residence. Maternal serum cotinine levels were prospectively measured, using quantitative immunoassay, from early- to mid-gestation serum specimens archived in a national biobank. Results:A higher maternal cotinine level, measured as a continuous variable, was associated with an increased odds of schizophrenia (odds ratio=3.41, 95% confidence interval, 1.86–6.24). Categorically defined heavy maternal nicotine exposure was related to a 38%

increased odds of schizophrenia. These findings were not accounted for by maternal age, maternal or parental psychiatric disorders, socioeconomic status, and other covariates. There was no clear evidence that weight for gestational age mediated the associations. Conclusions:To the authors' knowledge, this is the first study of the relationship between a maternal smoking biomarker and schizophrenia. It provides the most definitive evidence to date that smoking during pregnancy is associated with schizophrenia. If replicated, these findings suggest that preventing smoking during pregnancy may decrease the incidence of schizophrenia.

Pandey, A., M. R. Patel, et al. (2016). ***"Association between midlife cardiorespiratory fitness and risk of stroke: The cooper center longitudinal study."*** Stroke.
http://stroke.ahajournals.org/content/early/2016/06/09/STROKEAHA.115.011532.abstract

Background and Purpose—Low cardiorespiratory fitness (CRF) is associated with an increased risk of stroke. However, the extent to which this association is explained by the development of stroke risk factors such as diabetes mellitus, hypertension, and atrial fibrillation is unknown. We evaluated the relationship between midlife CRF and risk of stroke after the age of 65 years, independent of the antecedent risk factor burden. Methods—Linking participant data from the Cooper Center Longitudinal Study with Medicare claims files, we studied 19 815 individuals who survived to receive Medicare coverage from 1999 to 2009. CRF estimated at baseline by Balke treadmill time was analyzed as a continuous variable (in metabolic equivalents) and according to age- and sex-specific quintiles (Q1=low CRF). Associations between midlife CRF and stroke hospitalization after the age of 65 years were assessed by applying a proportional hazards recurrent events model to the failure time data with hypertension, diabetes mellitus, and atrial fibrillation as time-dependent covariates. Results—After 129 436 person-years of Medicare follow-up, we observed 808 stroke hospitalizations. After adjustment for baseline risk factors, higher midlife CRF was associated with a lower risk of stroke hospitalization (hazard ratio [HR], 0.61; 95% confidence interval [CI], 0.49–0.76; quintiles 4–5 versus 1]. This association remained unchanged after additional adjustment for burden of Medicare-identified stroke risk factors (hypertension, diabetes mellitus, and atrial fibrillation; HR, 0.63; 95% CI, 0.51–0.79; quintiles 4–5 versus 1). Conclusions—There is a strong, inverse association between midlife CRF and stroke risk in later life independent of baseline and antecedent burden of risk factors, such as hypertension, diabetes mellitus, and atrial fibrillation.

Purdue-Smithe, A. C., J. E. Manson, et al. (2016). ***"A prospective study of caffeine and coffee intake and premenstrual syndrome."*** The American Journal of Clinical Nutrition 104(2): 499-507. http://ajcn.nutrition.org/content/104/2/499.abstract

Background: Clinically significant premenstrual syndrome (PMS) affects 15–20% of premenopausal women, substantially reducing quality of life. Women with PMS often are counseled to minimize caffeine intake, although only limited evidence supports this recommendation.Objective: We evaluated the association between total caffeine, coffee, and tea intake and the development of PMS in a case-control study nested within the prospective Nurses' Health Study II.Design: All participants were free from PMS at baseline (1991). PMS cases reported a new clinician-made diagnosis of PMS on biennial questionnaires between 1993 and 2005, and then confirmed symptom timing and moderate-to-severe impact and severity of symptoms with the use of a retrospective questionnaire (n = 1234). Controls did not report PMS and confirmed experiencing no symptoms or few mild symptoms with limited personal impact (n = 2426). Caffeine, coffee, and tea intake was measured by food-frequency questionnaires every 4 y, and data on smoking, body weight, and other factors were updated every 2–4 y. Logistic regression was used to evaluate the associations of total caffeine intake and frequency of coffee and tea consumption with PMS.Results: After adjustment for age, smoking, and other factors, total caffeine intake was not associated with PMS. The OR comparing women with the highest (quintile median = 543 mg/d) to the lowest (quintile median = 18 mg/d) caffeine intake was 0.79 (95% CI: 0.61, 1.04; P-trend = 0.31). High caffeinated coffee intake also was not associated with risk of PMS or specific symptoms, including breast tenderness (OR for ≥4 cups/d compared with <1/mo: 0.73; 95% CI: 0.48, 1.12; P-trend = 0.44).Conclusions: Our findings suggest that caffeine intake is not associated with PMS, and that current recommendations for women to reduce caffeine intake may not help prevent the development of PMS.

Reitz, A. K., F. Motti-Stefanidi, et al. (2016). ***"Me, us, and them: Testing sociometer theory in a socially diverse real-life context."*** J Pers Soc Psychol 110(6): 908-920. http://www.ncbi.nlm.nih.gov/pubmed/26595714

Although numerous studies have emphasized the role evaluations by others play for people's self-esteem, the perspective of others and the social diversity of real-life contexts have largely been ignored. In a large-scale longitudinal study, we examined the link between adolescents' self-esteem and their self- and peer-perceived popularity in socially diverse classrooms. First, we tested the competing directions of effects predicted by sociometer theory (i.e., peer-perceived popularity affects self-esteem, mediated by self-perceived popularity) and the self-broadcasting perspective (i.e., self-esteem affects peer-perceived popularity). Second, we examined differential effects of popularity in the own social group ("us") versus others ("them") by using immigrant status groups (i.e., immigrants versus host-nationals). We examined 1,057 13-year-old students in 3 annual waves. Cross-lagged analyses revealed that popularity among peers of the in-group but not among peers of the out-group prospectively predicted self-esteem, which was mediated by self-perceived popularity. Self-esteem in turn prospectively predicted self- but not peer-perceived popularity. In sum, the findings provide support for sociometer theory and a conscious sociometer mechanism but no support for the self-broadcasting perspective. The findings further demonstrate that the sociometer was more responsive to popularity in immigrant status in- than out-groups. In conclusion, the findings underscore the need to consider the perspective of others and their social group memberships to better understand the complexities of the link between self-esteem and popularity.

Roberts, D. (2016) ***Why small talk is so excruciating***. Vox: Science & Health http://www.vox.com/2015/7/7/8903123/small-talkh

This is an interesting article arguing for the important social function of small talk. The last section says - I know what I'm saying, but not what I'm doing: I am far more comfortable with the communicative role of language than the social role. And over the course of my life, my choices have reinforced that skills mismatch. I read more than I talk to people. I write more than I talk to people. I generally avoid small talk whenever possible. It's like exercising one set of muscles and not another; when it comes to language, I have massive upper-body strength and puny, spindly legs (er, metaphorically speaking). Also, it should be noted, privileged white males have the luxury of remaining ignorant of subtle social signals; less-privileged groups live and die by them. Small talk is not so small to them. Anyway, small talk engages the muscles and habits I have least developed. The functions of language I understand are backgrounded while the functions I don't understand are foregrounded. The criteria by which one chooses what to say shift from "what's true; what's most interesting" to "what lubricates the exchange; what sets people at ease." In effect, it's like trying to speak a foreign language — confoundingly, a foreign language that uses the same words my language uses, as though I'm using a familiar tool for an unfamiliar task. When I meet someone, I'm trying to a) maintain eye contact, which feels like holding an exposed wire with low-level current running through it, and b) think of things to say that convey the correct social signals, even though I'm not certain what the correct social signals are, while c) ensuring that none of the things I say bring up any emotionally fraught or controversial topics, even though those are the topics I care most about, and d) concealing the fact that the inside of my head is a haze of white noise and I desperately want to escape the

interaction. It's like patting your head while rubbing your belly ... while tap dancing and reciting the alphabet backward. Those of you who do it fluidly, without even thinking about it, should pause for a moment of gratitude. It is an important skill, one that many people lack and are never taught. And if you ever meet me out on the street, just go ahead and ask me about politics or religion or the meaning of life — anything but sports or the weather. We'll get along famously.

Robinson, J. K., J. D. Wayne, et al. (2016). ***"Early detection of new melanomas by patients with melanoma and their partners using a structured skin self-examination skills training intervention: A randomized clinical trial."*** JAMA Dermatology 152(9): 979-985. http://dx.doi.org/10.1001/jamadermatol.2016.1985

Importance More than 1 million patients with melanoma in the United States are at risk to develop a second primary melanoma. Early detection of melanoma improves survival. Patients with melanoma may be able to self-manage care with their skin-check partners ("partners") and alert the physician when a concerning lesion is identified, thus providing an important adjunct to yearly skin examinations by a physician.Objective To evaluate the effect of a structured skin self-examination (SSE) intervention for patients with melanoma and their partners ("dyads") on SSE performance and the detection of new melanomas by the dyad or the physician.Design, Setting, and Participants Randomized clinical trial with 24-month follow-up assessments. Patients with stage 0 to IIB melanoma and their skin-check partners participated from June 6, 2011, to April 24, 2015.Interventions Dyads of patients and their partners were randomly assigned to receive the skills training intervention or customary care (control group).Main Outcomes and Measures The main outcome was frequency of SSE performance. The secondary outcome was detection of a new or recurrent melanoma by the dyad or physician. The tertiary outcome was the number of unscheduled physician appointments for concerning lesions.Results The study cohort comprised 494 participants. The patient population was 51.2% (253 of 494) female and had a mean (SD) age of 55 (10) years. Patients in the intervention arms had significantly increased SSEs with their partners at 4, 12, and 24 months (P < .001 for all) compared with the control group (mean differences, 1.57 [95% CI, 1.29-1.85], 0.72 [95% CI, 0.39-1.06], and 0.94 [95% CI, 0.58-1.30], respectively). Patients in the intervention arms identified new melanomas more than those in the control group ($\chi 21 = 28.77$, P < .01 [n = 51 melanomas in situ] and $\chi 21 = 6.43$, P < .05 [n = 18 invasive melanomas]) and did not increase physician visits.Conclusions and Relevance Patients with melanoma and their partners reliably performed SSE after participating in a structured skills training program lasting approximately 30 minutes, with reinforcement every 4 months by the study dermatologist. Accurate SSE by those at risk to develop melanoma may enhance early detection and relieve some of the burden on health services to provide continuing follow-up to a growing population of eligible patients.

Schleicher, R. L., M. R. Sternberg, et al. (2016). ***"The vitamin d status of the us population from 1988 to 2010 using standardized serum concentrations of 25-hydroxyvitamin d shows recent modest increases."*** The American Journal of Clinical Nutrition 104(2): 454-461. http://ajcn.nutrition.org/content/104/2/454.abstract

Background: Temporal trends in the US population's vitamin D status have been uncertain because of nonstandardized serum 25-hydroxyvitamin D [25(OH)D] measurements.Objective: To accurately assess vitamin D status trends among those aged ≥12 y, we used data from the cross-sectional NHANESs.Design: A liquid chromatography–tandem mass spectrometry (LC-MS/MS) method for measuring 25(OH)D (sum of 25-hydroxyvitamin D2 and 25-hydroxyvitamin D3), calibrated to standard reference materials, was used to predict LC-MS/MS–equivalent concentrations from radioimmunoassay data (1988–2006 surveys; n = 38,700) and to measure LC-MS/MS concentrations (2007–2010 surveys; n = 12,446). Weighted arithmetic means and the prevalence of 25(OH)D above or below cutoff concentrations were calculated to evaluate long-term trends.Results: Overall, mean predicted 25(OH)D showed no time trend from 1988 to 2006, but during 2007–2010 the mean measured 25(OH)D was 5–6 nmol/L higher. Those groups who showed the largest 25(OH)D increases (7–11 nmol/L) were older, female, non-Hispanic white, and vitamin D supplement users. During 1988–2010, the proportions of persons with 25(OH)D <40 nmol/L were 14–18% (overall), 46–60% (non-Hispanic blacks), 21–28% (Mexican Americans), and 6–10% (non-Hispanic whites).Conclusions: An accurate method for measuring 25(OH)D showed stable mean concentrations in the US population (1988–2006) and recent modest increases (2007–2010). Although it is unclear to what extent supplement usage compared with different laboratory methods explain the increases in 25(OH)D, the use of higher vitamin D supplement dosages coincided with the increase. Marked race-ethnic differences in 25(OH)D concentrations were apparent. These data provide the first standardized information about temporal trends in the vitamin D status of the US population.

Sherman, G. D., J. S. Lerner, et al. (2016). ***"The interaction of testosterone and cortisol is associated with attained status in male executives."*** J Pers Soc Psychol 110(6): 921-929. http://www.ncbi.nlm.nih.gov/pubmed/26302434

Are hormone levels associated with the attainment of social status? Although endogenous testosterone predicts status-seeking social behaviors, research suggests that the stress hormone cortisol may inhibit testosterone's effects. Thus, individuals with both high testosterone and low cortisol may be especially likely to occupy high-status positions in social hierarchies while individuals with high testosterone and high cortisol may not. We tested this hypothesis by recruiting a sample of real executives and examining testosterone, cortisol, and a concrete indicator of attained status: the number of subordinates over which the executive has authority. Despite the myriad nonhormonal factors that determine organizational promotion, the executives' endogenous testosterone and cortisol interacted to significantly predict hierarchical position: Testosterone positively predicted executives' number of subordinates, but only among low-cortisol executives. The results imply that reducing cortisol levels via stress reduction may be a critical goal not only because doing so will improve health but also because doing so may enhance leadership potential.

Silventoinen, K., A. Jelenkovic, et al. (2016). ***"Genetic and environmental effects on body mass index from infancy to the onset of adulthood: An individual-based pooled analysis of 45 twin cohorts participating in the collaborative project of development of anthropometrical measures in twins (codatwins) study."*** The American Journal of Clinical Nutrition 104(2): 371-379. http://ajcn.nutrition.org/content/104/2/371.abstract

Background: Both genetic and environmental factors are known to affect body mass index (BMI), but detailed understanding of how their effects differ during childhood and adolescence is lacking.Objectives: We analyzed the genetic and environmental contributions to BMI variation from infancy to early adulthood and the ways they differ by sex and geographic regions representing high (North America and Australia), moderate (Europe), and low levels (East Asia) of obesogenic environments.Design: Data were available for 87,782 complete twin pairs from 0.5 to 19.5 y of age from 45 cohorts. Analyses were based on 383,092 BMI measurements. Variation in BMI was decomposed into genetic and environmental components through genetic structural equation modeling.Results: The variance of BMI increased from 5 y of age along with increasing mean BMI. The proportion of BMI variation explained by additive genetic factors was lowest at 4 y of age in boys (a2 = 0.42) and girls (a2 = 0.41) and then generally increased to 0.75 in both sexes at 19 y of age. This was because of a stronger influence of environmental factors shared by co-twins in midchildhood. After 15 y of age, the effect of shared environment was not observed. The sex-specific expression of genetic factors was seen in infancy but was most prominent at 13 y of age and older. The variance of BMI was highest in North America and Australia and lowest in East Asia, but the relative proportion of genetic

variation to total variation remained roughly similar across different regions.Conclusions: Environmental factors shared by co-twins affect BMI in childhood, but little evidence for their contribution was found in late adolescence. Our results suggest that genetic factors play a major role in the variation of BMI in adolescence among populations of different ethnicities exposed to different environmental factors related to obesity.

Skovlund, C., L. Mørch, et al. (2016). ***"Association of hormonal contraception with depression."*** JAMA Psychiatry. http://dx.doi.org/10.1001/jamapsychiatry.2016.2387

(Available in free full text) Importance Millions of women worldwide use hormonal contraception. Despite the clinical evidence of an influence of hormonal contraception on some women's mood, associations between the use of hormonal contraception and mood disturbances remain inadequately addressed. Objective To investigate whether the use of hormonal contraception is positively associated with subsequent use of antidepressants and a diagnosis of depression at a psychiatric hospital. Design, Setting, and Participants This nationwide prospective cohort study combined data from the National Prescription Register and the Psychiatric Central Research Register in Denmark. All women and adolescents aged 15 to 34 years who were living in Denmark were followed up from January 1, 2000, to December 2013, if they had no prior depression diagnosis, redeemed prescription for antidepressants, other major psychiatric diagnosis, cancer, venous thrombosis, or infertility treatment. Data were collected from January 1, 1995, to December 31, 2013, and analyzed from January 1, 2015, through April 1, 2016.Exposures Use of different types of hormonal contraception. Main Outcomes and Measures With time-varying covariates, adjusted incidence rate ratios (RRs) were calculated for first use of an antidepressant and first diagnosis of depression at a psychiatric hospital. Results A total of 1 061 997 women (mean [SD] age, 24.4 [0.001] years; mean [SD] follow-up, 6.4 [0.004] years) were included in the analysis. Compared with nonusers, users of combined oral contraceptives had an RR of first use of an antidepressant of 1.23 (95% CI, 1.22-1.25). Users of progestogen-only pills had an RR for first use of an antidepressant of 1.34 (95% CI, 1.27-1.40); users of a patch (norgestrolmin), 2.0 (95% CI, 1.76-2.18); users of a vaginal ring (etonogestrel), 1.6 (95% CI, 1.55-1.69); and users of a levonorgestrel intrauterine system, 1.4 (95% CI, 1.31-1.42). For depression diagnoses, similar or slightly lower estimates were found. The relative risks generally decreased with increasing age. Adolescents (age range, 15-19 years) using combined oral contraceptives had an RR of a first use of an antidepressant of 1.8 (95% CI, 1.75-1.84) and those using progestin-only pills, 2.2 (95% CI, 1.99-2.52). Six months after starting use of hormonal contraceptives, the RR of antidepressant use peaked at 1.4 (95% CI, 1.34-1.46). When the reference group was changed to those who never used hormonal contraception, the RR estimates for users of combined oral contraceptives increased to 1.7 (95% CI, 1.66-1.71). Conclusions and Relevance Use of hormonal contraception, especially among adolescents, was associated with subsequent use of antidepressants and a first diagnosis of depression, suggesting depression as a potential adverse effect of hormonal contraceptive use. [And see Guardian commentary at https://www.theguardian.com/commentisfree/2016/oct/03/pill-linked-depression-doctors-hormonal-contraceptives?CMP=fb_gu].

Spiers, N., T. Qassem, et al. (2016). ***"Prevalence and treatment of common mental disorders in the english national population, 1993–2007."*** The British Journal of Psychiatry 209(2): 150-156. http://bjp.rcpsych.org/content/early/2016/05/31/bjp.bp.115.174979

Background The National Psychiatric Morbidity Surveys include English cross-sectional household samples surveyed in 1993, 2000 and 2007. Aims To evaluate frequency of common mental disorders (CMDs), service contact and treatment.MethodCommon mental disorders were identified with the Clinical Interview Schedule – Revised (CIS-R). Service contact and treatment were established in structured interviews. Results There were 8615, 6126 and 5385 participants aged 16–64. Prevalence of CMDs was consistent (1993: 14.3%; 2000: 16.0%; 2007: 16.0%), as was past-year primary care physician contact for psychological problems (1993: 11.3%; 2000: 12.0%; 2007: 11.7%). Antidepressant receipt in people with CMDs more than doubled between 1993 (5.7%) and 2000 (14.5%), with little further increase by 2007 (15.9%). Psychological treatments increased in successive surveys. Many with CMDs received no treatment. Conclusions Reduction in prevalence did not follow increased treatment uptake, and may require universal public health measures together with individual pharmacological, psychological and computer-based interventions.

Stickley, A. and A. Koyanagi (2016). ***"Loneliness, common mental disorders and suicidal behavior: Findings from a general population survey."*** Journal of Affective Disorders 197: 81-87. http://www.sciencedirect.com/science/article/pii/S0165032715310442

Abstract Background Loneliness has been linked to an increased risk of engaging in suicidal behavior. To date, however, there has been comparatively little research on this in the general adult population, or on the role of common mental disorders (CMDs) in this association. The current study examined these associations using nationally representative data from England. Methods Data came from the Adult Psychiatric Morbidity Survey 2007. Information was obtained from 7403 household residents aged ≥16 years on perceived loneliness and lifetime and past 12-month suicide ideation and attempts. The Clinical Interview Schedule Revised (CIS-R) was used to assess six forms of CMD. Logistic regression analysis was used to examine these associations. Results Loneliness was associated with suicidal behavior. Although adjusting for CMDs attenuated associations, higher levels of loneliness were still significantly associated with suicidal ideation and suicide attempts with odds ratios (OR) for those in the most severe loneliness category ranging from 3.45 (lifetime suicide attempt) to 17.37 (past 12-month suicide attempt). Further analyses showed that ORs for suicidal behavior were similar for individuals who were lonely without CMDs, and for those respondents with CMDs who were not lonely. Lonely individuals with CMDs had especially elevated odds for suicidal ideation. Limitations This study used cross-sectional data and a single-item measure to obtain information on loneliness. Conclusion Loneliness is associated with suicidal behavior in the general adult population. This highlights the importance of efforts to reduce loneliness in order to mitigate its harmful effects on health and well-being.

Stubbs, B., D. Vancampfort, et al. (2016). ***"The prevalence and predictors of obstructive sleep apnea in major depressive disorder, bipolar disorder and schizophrenia: A systematic review and meta-analysis."*** Journal of Affective Disorders 197: 259-267. http://www.sciencedirect.com/science/article/pii/S0165032715311939

Background Obstructive sleep apnea (OSA) is a health hazard since it is associated with neurocognitive dysfunction and cardio-metabolic diseases. The prevalence of OSA among people with serious mental illness (SMI) is unclear. Method We searched major electronic databases from inception till 06/2015. Articles were included that reported the prevalence of OSA determined by polysomnography (PSG) or an apnea-hypopnea index (AHI) > or = 5 events/hr, in people with major depressive disorder (MDD), bipolar disorder (BD) or schizophrenia. A random effects meta-analysis calculating the pooled prevalence of OSA and meta-regression of potential moderators were performed. Results Twelve articles were included representing 570,121 participants with SMI (mean age=38.3 years (SD=7.5)), 45.8% male (range=32–80.4) and mean body mass index (BMI) 25.9 (SD=3.7). The prevalence of OSA in SMI in clinical studies was 25.7% (95% CI 13.9 to 42.4%, n=1,535). Higher frequencies of OSA were seen in MDD (36.3%, 19.4–57.4%, n=525) than in BD (24.5%, 95% CI 10.6–47.1, n=681) and schizophrenia (15.4%, 95% CI 5.3–37.1%, n=329). The prevalence of OSA in 568,586 people with SMI from population cohort studies was

10.7% (95% CI 2.4–37.0%) and 19.8% (95% CI 2.5–70.0%) in 358,853 people with MDD. Increasing age (β=0.063, 95% CI 0.0005–0.126, p=0.04, N=10) and BMI predicted increased prevalence of OSA (β=0.1642, 95% CI 0.004–0.3701, p=0.04, N=9). Conclusion People with SMI (particularly MDD) have a high prevalence of OSA. Screening for and interventions to manage OSA in SMI including those focused on reducing BMI are warranted.

van den Berg, K. S., R. M. Marijnissen, et al. (2016). ***"Vitamin d deficiency, depression course and mortality: Longitudinal results from the netherlands study on depression in older persons (nesdo)."*** Journal of Psychosomatic Research 83: 50-56. http://www.sciencedirect.com/science/article/pii/S0022399916300393

Abstract Objective To study the effect of vitamin D levels on depression course and remission status after two years, as well as attrition and mortality, in an older cohort. Methods This study was part of the Netherlands Study on Depression in Older persons (NESDO), a prospective cohort study. 367 depressed older persons (≥ 60 years) were included. Baseline vitamin D status, reasons for loss to follow up, clinical depression diagnosis at two-year follow up, and six-monthly symptom scores were obtained. Data were analyzed by logistic regression and random coefficient models and adjusted for confounders of vitamin D status. Results Vitamin D had no effect on the course of depression or remission, except for a trend towards lower remission rates in the severely deficient subgroup (25-(OH) vitamin D < 25 nmol/l). Patients who died during follow up had significantly lower 25-(OH) vitamin D and 1,25-(OH)2 vitamin D levels than patients with continued participation. Conclusions For the total sample we found no effect of vitamin D levels on the course of depression or remission rates. However, we did find an effect of lower vitamin D levels on mortality. This strengthens the interpretation of vitamin D deficiency being a marker for poor somatic health status. The trend towards lower remission rates in the severely deficient subgroup raises the question whether this group could benefit from supplementation. Randomized controlled trials are necessary to study this.

Waller, K., J. Kaprio, et al. (2016). ***"Persistent leisure-time physical activity in adulthood and use of antidepressants: A follow-up study among twins."*** Journal of Affective Disorders 200: 172-177. http://www.sciencedirect.com/science/article/pii/S0165032716302051

Abstract Background To study whether persistent leisure-time physical activity (PA) during adulthood predicts use of antidepressants later in life. Methods The Finnish Twin Cohort comprises same-sex twin pairs born before 1958, of whom 11 325 individuals answered PA questions in 1975, 1981 and 1990 at a mean age of 44 years (range 33–60). PA volume over 15-years was used as the predictor of subsequent use of antidepressants. Antidepressant use (measured as number of purchases) for 1995–2004 were collected from the Finnish Social Insurance Institution (KELA) prescription register. Conditional logistic regression was conducted to calculate odds ratios (OR) with 95% confidence intervals (CI) for the use of antidepressants in pairs discordant for PA (642, including 164 monozygotic (MZ) pairs). Results Altogether 229 persons had used at least one prescribed antidepressant during the study period. Active co-twins had a lower risk (unadjusted OR 0.80, 95%CI 0.67–0.95) for using any amount of antidepressants than their inactive co-twins; trends being similar for DZ (0.80, 0.67–0.97) and MZ pairs (0.78, 0.51–1.17). The lowest odds ratio (0.51, 0.26–0.98) was seen among MZ pairs after adjusting for BMI, smoking and binge drinking. The point estimates were similar but non-significant for long-term antidepressant use (4+purchases equivalent to 12 months use). Limitations Self-reported physical activity and low number of discordant MZ pairs. Discussion Use of antidepressants was less common among physically active co-twins even when shared childhood experiences and genetic background were controlled for. Physical activity in midlife may therefore be important in preventing mild depression later in life.

Xu, J. and J. Metcalfe (2016). ***"Studying in the region of proximal learning reduces mind wandering."*** Memory & Cognition 44(5): 681-695. http://dx.doi.org/10.3758/s13421-016-0589-8

Insofar as mind wandering has been linked to poor learning, finding ways to reduce the propensity to mind wander should have implications for improving learning. We investigated the possibility that studying materials at an appropriate level of difficulty with respect to the individual's capabilities—that is, studying in the region of proximal learning (RPL)—might reduce mind wandering. In Experiments 1 and 2, participants were probed for their attentional state while they studied blocks of English–Spanish word pairs that were (a) easy, (b) in the RPL, or (c) difficult. We found that studying materials in the RPL was associated with reduced mind wandering. Test performance on items studied while mind wandering was also poorer. In Experiment 3, we investigated the relation between differences in participants' mastery and mind wandering. We found that high performers mind wandered more when studying the easier word pairs, whereas low performers mind wandered more when studying the difficult items. These results indicate that the RPL is specific to the individual's level of mastery and that mind wandering occurs when people are outside that region.

Yu, Z., V. S. Malik, et al. (2016). ***"Associations between nut consumption and inflammatory biomarkers."*** The American Journal of Clinical Nutrition 104(3): 722-728. http://ajcn.nutrition.org/content/104/3/722.abstract

Background: Increased nut consumption has been associated with reduced risk of cardiovascular disease and type 2 diabetes, as well as a healthy lipid profile. However, the associations between nut consumption and inflammatory biomarkers are unclear.Objective: We investigated habitual nut consumption in relation to inflammatory biomarkers in 2 large cohorts of US men and women. Design: We analyzed cross-sectional data from 5013 participants in the Nurses' Health Study (NHS) and Health Professionals Follow-Up Study (HPFS) who were free of diabetes. Nut intake, defined as intake of peanuts and other nuts, was estimated from food-frequency questionnaires, and cumulative averages from 1986 and 1990 in the NHS and from 1990 and 1994 in the HPFS were used. Plasma biomarkers were collected in 1989–1990 in the NHS and 1993–1995 in the HPFS. Multivariate linear regression was used to assess the associations of nut consumption with fasting plasma C-reactive protein (CRP, n = 4941), interleukin 6 (IL-6, n = 2859), and tumor necrosis factor receptor 2 (TNFR2, n = 2905). Results: A greater intake of nuts was associated with lower amounts of a subset of inflammatory biomarkers, after adjusting for demographic, medical, dietary, and lifestyle variables. The relative concentrations (ratios) and 95% CIs comparing subjects with nut intake of ≥5 times/wk and those in the categories of never or almost never were as follows: CRP: 0.80 (0.69, 0.90), P-trend = 0.0003; and IL-6: 0.86 (0.77, 0.97), P-trend = 0.006. These associations remained significant after further adjustment for body mass index. No significant association was observed with TNFR2. Substituting 3 servings of nuts/wk for 3 servings of red meat, processed meat, eggs, or refined grains/wk was associated with significantly lower CRP (all P < 0.0001) and IL-6 (P ranges from 0.001 to 0.017). Conclusion: Frequent nut consumption was associated with a healthy profile of inflammatory biomarkers.