Red hot chili peppers do not worsen hemorrhoid symptoms

Clinical question
Does eating spicy foods -- red hot chili peppers, specifically -- exacerbate hemorrhoid symptoms?

Bottom line
This study found no evidence to support the popular contention that spicy foods, including red hot chili peppers, exacerbates hemorrhoid symptoms. Clinicians need not warn patients with hemorrhoids to avoid spicy foods. (LOE = 1b)

Reference
Altomare DF, Rinaldi M, La Torre F, et al. Red hot chili pepper and hemorrhoids: The explosion of a myth: Results of a prospective, randomized, placebo-controlled trial. Dis Colon Rectum 2006;49:1018-1023.

Study Design
Randomized controlled trial (double-blinded)

Funding
Self-funded or unfunded

Allocation
Concealed

Setting
Population-based

Synopsis
Spicy foods are frequently blamed by patients and clinicians for deleterious and explosive exacerbations of hemorrhoid symptoms. The investigators identified 50 adults (aged 37-57 years) affected by second-degree or third-degree hemorrhoids. Subjects randomly received (concealed allocation assignment) 2 identical blue capsules containing red hot chili pepper powder or placebo cellulose. The quantity of red hot chili pepper powder equaled the amount necessary to make a normal dish "spicy enough," as defined by the Association of Teachers of Italian Cuisine (equal to the "tip of the knife"). After baseline evaluation, patients consumed 1 of the capsules during the course of a regular meal. One week later, they repeated the treatment taking the other capsule. Subjects were instructed to avoid other foods potentially related to gastrointestinal symptoms, such as alcoholic drinks, coffee, and chocolate. Using a 10-cm visual analog scale, subjects scored the severity of hemorrhoid symptoms, such as bleeding and swelling, itching, pain, and anal burning before and 6, 24, and 48 hours after capsule ingestion. Both patients and clinicians remained unaware of the content of each capsule. Fortunately, hemorrhoid symptoms were low at baseline and remained low in all patients throughout the study, with no significant differences detected between the red hot chili pepper or placebo groups. The study was 90% powered to detect a 5% difference in hemorrhoid symptoms.

Maternal shoe size not related to infant birth weight

Clinical question
Is maternal shoe size predictive of infant birth weight?

Bottom line
Prepregnancy maternal shoe size does not correlate with infant birth weight. (LOE = 1b)

Reference
Stephens MB, Manning DA, Arnold-Canuso A, Haas DM. Maternal shoe size and infant birth weight: Correlation or fiction? J Am Board Fam Med 2006;19:426-428.

Study Design
Cross-sectional

Funding
Government

Setting
Inpatient (any location) with outpatient follow-up

Synopsis
Legend suggests that a woman's shoe size correlates with her newborn baby's birth weight. The investigators obtained data from 111 consecutive women presenting for maternity care at the Naval Hospital Camp Lejeune, North Carolina. Exclusion criteria included patients presenting at less than 36 weeks' gestation or with gestational diabetes. Prepregnancy shoe size, based on maternal recall, was recorded in whole numbers with interval half-sizes as appropriate. The mean age of surveyed women was 25 years, with shoe sizes ranging from 5 to 12. No correlation between maternal shoe size and infant birth weight was found. As expected, increasing infant birth weight significantly correlated with a higher maternal body mass index and an increased risk of operative delivery. A potentially important study limitation includes the lack of validation of maternal shoe size recall.

Doxycycline prophylaxis effective for tick-borne relapsing fever

Clinical question
Is postexposure prophylaxis with doxycycline effective at preventing the onset of tick-borne relapsing fever?

Bottom line
Doxycycline at an initial dose of 200 mg followed by 4 days of 100 mg daily effectively prevents tick-borne relapsing fever (TBRF) in patients in a TBRF-endemic area who have evidence of a tick bite. (LOE = 1b)

Reference
Hasin T, Davidovitch N, Cohen R, et al. Postexposure treatment with doxycycline for the prevention of tick-borne relapsing fever. N Engl J Med 2006;355:148-155.

Study Design
Randomized controlled trial (double-blinded)

Funding
Government

Allocation
Concealed

Setting
Population-based

Synopsis
TBRF is an infection caused by spirochetes of the genus Borrelia. Not surprisingly, it is spread by ticks during a blood meal on a host (like you or me). The infection rate is 50% for each tick bite, and the incubation period ranges from 2 days to 18 days. This study was done in members of the Israeli military who were training where the disease is endemic. After the training exercise, any soldier with signs of a tick bite were randomly assigned to receive 200 mg doxycycline as an initial dose followed by 100 mg daily for 4 more days or matching placebo. Participants were monitored closely for symptoms of TBRF and interviewed 1 week and 3 weeks after randomization. Blood samples to test for Borrelia infection were taken 15 days to 21 days after randomization. Any participants who developed symptoms of TBRF were treated with doxycycline and had blood drawn 2 weeks after symptoms began. Of 582 soldiers screened for tick bites, 125 either had a bite or were close contacts of someone who had been bitten and 93 agreed to participate in the study. Ten cases of TBRF were diagnosed, all in the placebo group and all among patients who actually had evidence of a tick bite. There were no cases of TBRF in the 47 soldiers who received doxycycline prophylaxis. The Jarisch-Herxheimer reaction did not occur in any patients in the doxycycline prophylaxis group, but occured in 80% of those treated after the onset of TBRF. Adverse effects of treatment were minor and did not differ from those of placebo.

Antioxidants don't prevent colorectal cancer

Clinical question
Can colorectal cancer risk be decreased with antioxidant supplements?

Bottom line
Antioxidant supplementation for up to 6 years does not decrease the risk of colorectal adenomatous polyps and thus, by extension, does not reduce the risk of colorectal cancer. Vitamin E may increase the risk of colorectal adenoma. (LOE = 1a-)

Reference
Bjelakovic G, Nagorni A, Nikolova D, Simonetti RG, Bjelakovic M, Gluud C. Meta-analysis: antioxidant supplements for primary and secondary prevention of colorectal adenoma. Aliment Pharmacol Ther 2006;24:281-291.

Study Design
Meta-analysis (randomized controlled trials)

Funding
Self-funded or unfunded

Setting
Outpatient (any)

Synopsis
The researchers conducted this analysis used standard methodology and searched 5 databases for all randomized trials comparing beta-carotene, vitamin A, vitamin C, vitamin E, or selenium with no treatment or placebo on the development of colorectal adenoma, a cancer precursor. They also searched for unpublished studies. They report that they used The Cochrane Collaboration methodology for conducting the meta-analysis but they don't give details of how they choose studies for inclusion or how they abstracted the data. They assessed the research for quality, identifying the studies as high quality or low quality according to study design. There was no publication bias.The 8 trials used in this analysis included a total of 17,260 participants, though most of the patients (88%) were in a single high-quality study. This study enrolled patients without previous adenoma; the rest of the studies enrolled participants with previously removed colorectal adenomas (6 studies) or previous colorectal cancer (1 study). Overall, there was no benefit of antioxidant supplementation on the development of colorectal adenoma. High-quality studies showed no effect or a slight increase of risk of adenoma with antioxidants; the small, low-quality studies found a benefit with antioxidants. When analyzed separately, none of the individual antioxidants had a beneficial effect on adenoma rates. Vitamin E, used in the largest study, produced a statistically significant increase in the risk of colorectal adenoma (relative risk = 1.7; 95% CI, 1.1-2.8).
Level Of Evidence (LOE): http://www.infopoems.com/levels.html |