

DIABETES

Insulin glargine and NPH insulin increase to a similar degree epithelial cell proliferation and aberrant crypt foci formation in colons of diabetic mice

Nagel, J. M. *et al. Horm. Cancer* doi:10.1007/s12672-010-0020-z

Does use of insulin glargine—which binds to the insulin-like growth factor 1 receptor with a higher affinity than neutral protamine Hagedorn (NPH) insulin and, hence, might promote adverse mitogenic effects—increase risk of malignancy? Nagel *et al.* investigated this question by comparing the effects of chronic treatment with insulin glargine or NPH insulin on cell proliferation in the colonic mucosa and on formation of aberrant crypt foci (ACF; a precancerous change) in a mouse model of diabetes. Colonic epithelial proliferation and formation of ACF were increased in insulin-treated mice compared with nontreated mice; however, insulin glargine was not associated with increased risk of ACF compared with NPH insulin.

BONE

Associations between amino acids and bone mineral density in men with idiopathic osteoporosis

Pernow, Y. *et al. Bone* 47, 959–965 (2010)

In men with idiopathic osteoporosis, alteration of free amino acid profiles might provide a clue to the pathogenesis of this disease, report Pernow *et al.* The researchers studied the association between amino acid profiles and BMD, bone histomorphometry and hormones in 22 middle-aged men with idiopathic osteoporosis and 20 age-matched healthy men. Patients with idiopathic osteoporosis had a reduced ratio of essential to nonessential amino acids; this ratio positively correlated with spine BMD. In addition, patients had reduced levels of the essential amino acid tryptophan in their erythrocytes, which positively correlated with BMD and bone histomorphometric variables such as wall thickness.

OBESITY

Preventing obesity during infancy: a pilot study

Paul, I. M. *et al. Obesity* doi:10.1038/oby.2010.182

Overweight infants and toddlers are at an increased risk of remaining overweight; therefore, Paul *et al.* evaluated two behavioral obesity prevention interventions that aimed to promote healthy growth in infants in their first year. Targeted at parents, the interventions focused on optimizing infant sleep and soothing and the introduction of solid foods. In the randomized study with a 2×2 design, mean weight-for-length percentile was lower in infants who received both interventions than those who received one or no intervention. The researchers conclude that multicomponent behavioral interventions could promote healthy growth trajectories in infants.