



האוניברסיטה העברית בירושלים  
הפקולטה לחקלאות, מזון וסביבה ע"ש רוברט ה. סמית  
המכון לביוכימיה, מדעי המזון והתזונה



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### Title:

## Fighting "Hidden Hunger": Updates on the iron (and zinc) dietary deficiency challenge

המפגש יתקיים

ביום ג', 2 דצמבר 2014, בשעה 10:30

מועדון סגל

(Tuesday, 12/2/2014, Faculty Club)

### Abstract:

The World Health Organization estimates that approximately one-third of worldwide infant deaths and one half in developing countries can be attributed to malnutrition. More specifically, iron (Fe) deficiency is the most common nutritional deficiency worldwide. Fe deficiency is particularly widespread in low-income countries because of a general lack of consumption of animal products (which can promote non-heme Fe absorption and contain highly bioavailable heme Fe) coupled with a high consumption of cereal grains and legumes replete with antinutrients (e.g., polyphenolic compounds and phytic acid) that are inhibitors of Fe bioavailability. Poor dietary quality is more often characterized by micronutrient deficiencies or reduced mineral bioavailability ("hidden hunger"), than by insufficient energy intake. Diets with chronically poor Fe bioavailability which result in high prevalence of Fe deficiency and anemia increase the risk of all-cause child mortalities, and also may lead to many pathophysiological consequences including stunted growth, low birth weight, delayed mental development and motor functioning. Thus, a crucial step in alleviating Fe deficiency anemia is through understanding how specific dietary practices and components contribute to the Fe status in a particular region where Fe deficiency is prevalent. The objective of this presentation will be to demonstrate how the combination of in vitro screening and an animal model can be extremely useful approach to develop and monitor Fe-biofortified staple food crops, thus, several relevant studies presenting the methods used and aimed to alleviate dietary mineral deficiencies in at-risk populations will be discussed.

סגל וסטודנטים מוזמנים להשתתף

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