

Rebecca Stoltzfus

Web Bio

Information

Biography

Biographical Statement

Rebecca Stoltzfus holds a Ph.D. in Human nutrition from Cornell University (1992) and a B.A. in Chemistry from Goshen College (1984). From 1992-2002, she was assistant and then associate professor in the Department of International Health, Johns Hopkins Bloomberg School of Public Health. She joined the Division of Nutritional Sciences in 2002 as an associate professor and was promoted to professor in 2005. For the 2008-09 academic year, she was a visiting professor in the Department of Community Health, Kilimanjaro Christian Medical Center, Moshi Tanzania.

Her research focuses on the causes and consequences of malnutrition in women and children in developing countries. Current major projects include the SHINE (Sanitation, Hygiene, and Infant Nutrition Efficacy) Trial in Zimbabwe, Mycotoxins and Infant Growth (Zimbabwe), Implementation Science for Scaling up Nutrition (Tanzania, and a project in Kenya and Ethiopia to translate the new global recommendation for calcium supplementation in pregnancy into policies and programs in Kenya and Ethiopia. She currently directs the Program in International Nutrition, and Cornell's Global Health Program on the Ithaca campus.

She is also serving as the Provost's Fellow for Public Engagement, a half-time position to institutionalize Cornell's strategic plan for public engagement.

Department Website Summary

[Rebecca Stoltzfus, professor of Nutritional Sciences, discuss the function of red blood cells in this CNN article about fatigue](#)

Teaching

Teaching and Advising Statement

In my teaching, I utilize active learning strategies that foster independent thinking and enable students to integrate concepts from the classroom, their life experiences. In the global health program, we also support experiential learning, in which students can learn through doing. The impact of experiential learning is enhanced by critical reflection, and therefore I embed reflection in all of my courses. As an advisor of graduate students, I support independent thinking and

collaboration through an active multidisciplinary research group.

Professional

Current Professional Activities

- Invited Member, WHO Nutrition Guidance Expert Advisory Group, 2010-present
- Invited Member, National Academy of Sciences Forum on Investing in Young Children Globally
- Fellow, Grassroots Research and Advocacy Movement, Swami Vivekenanda Youth Movement, Mysore India. (2011—present)
- Nutrition Scientific Advisory Group of the New York Academy of Sciences. 2011—present.
- Faculty Fellow, Cornell Center for a Sustainable Future, 2009—present
- Faculty Fellow, Bronfenbrenner Center for Translational Research, 2012--present

Research

Current Research Activities

The goal of my research program is to improve the health and well being of women and children in low-income communities by improving their nutritional status. Current major research projects include:

- Sanitation, hygiene and infant nutrition efficacy (SHINE) Trial: effect on tropical enteropathy, anemia and growth in young children in rural Zimbabwe. A cluster-randomized factorial trial. (in collaboration with ZVITAMBO Project, Harare Zimbabwe, and the Johns Hopkins Bloomberg School of Public Health).
- Maternal capacities for child care: development of an interdisciplinary framework (in collaboration with ZVITAMBO Project, Harare Zimbabwe, and Alive & Thrive Project, Bangladesh)
- Establishing the link between mycotoxin exposure, gut function and stunting in Zimbabwean infants (in collaboration with ZVITAMBO Project, Harare Zimbabwe)
- Implementation Science for Scaline Up Nutrition (Tanzania)
- Integrating strategies for the prevention of preeclampsia and anemia into community based programs in Kenya and Ethiopia (in collaboration with Micronutrients Initiative)

Extension

Education

Education

Ph.D. 1992 - Cornell University, Human Nutrition

M.S. 1988 - Cornell University, Human Nutrition

B.A. 1984 - Goshen College, Chemistry

Courses

Courses Taught

NS 4620 Global Health Predeparture Seminar

Websites

Related Websites

[Division of Nutritional Sciences](#)
[Global Health Program](#)

Administration

Administrative Responsibilities

Provost's Fellow for Public Engagement

Director, Global Health Program, Ithaca campus

Publications

Selected Publications

Desai A, Mbuya MNN, Chigumira A, Chasekwa B, Humphrey JH, Moulton LH, Pelto G, Gerema G, Stoltzfus RJ, SHINE Study Team. Traditional oral remedies and perceived breastmilk insufficiency are major barriers to exclusive breastfeeding in Zimbabwe. *J Nutr* 2014; 144:1113-9. doi: 10.3945/jn.113.188714

Prendergast AJ, Rukobo S, Chasekwa B, Mutasa K, Ntozini R, Mbuya MNN, Jones A, Stoltzfus RJ, Humphrey JH. Stunting is characterized by small intestinal damage and chronic inflammation in infancy. *PLoS One*. 2014 Feb 18;9(2):e86928. doi: 10.1371

Ngure FM, Reid BM, Humphrey JH, Mbuya MNN, Pelto G, Stoltzfus RJ. Water, sanitation and hygiene (WASH), environmental enteropathy, nutrition, and early child development: making the links. *Ann N Y Acad Sci* 2014 13018:118-28.

Alexander P, Bero L, Montori V, Brito JP, Stoltzfus R, Djulbegovic B, Neumann I, Rave S, Guyatt G. World Health Organization recommendations are often strong

based on low confidence in effect estimates. *J Clin Epi* 2014; 67:629-34. DOI: <http://dx.doi.org/10.1016/j.jclinepi.2013.09.020>

Mupfudze T, Stoltzfus RJ, Rukubo S, Moulton L, Humphrey JH, Prendergast AJ, SHINE Project Team. Hepcidin decreases over the first year of life in healthy African infants. *Br J Haematol*. 2014 Jan;164(1):150-3. doi: 10.1111/bjh.12567

Ngure FM, Humphrey JH, Mbuya MNN, Majo F, Mutasa K, Govha M, Mazarura E, Chasekwa B, Prendergast AJ, Curtis V, Boor KJ, Stoltzfus RJ. Formative research on hygiene behaviors and geophagy among infants and young children and implications of exposure to fecal bacteria. *Am J Trop Med Hyg* 2013 89:709-16.

Mupfudze T, Stoltzfus RJ, Rukubo S, Moulton L, Humphrey JH, Prendergast AJ, SHINE Project Team. Hepcidin decreases over the first year of life in healthy African infants. *Brit J Hematol* 2013 Sep 20 [epub ahead of print] doi:10.1111/bjh.12567

Olney DK, Kariger PK, Stoltzfus RJ, Khalfan SS, Ali NS, Tielsch JM, Sazawal S, Black R, Allen LH, Pollitt E. Developmental effects of micronutrient supplementation and malaria in Zanzaibari children. *Early Human Development*. 2013; 89:667-74

Heidkamp RA, Ayoya MA, Teta IN, Stoltzfus RJ, Marhone JP. Complementary feeding practices and child growth outcomes in Haiti: an analysis of data from the Demographic and Health Surveys. *Maternal Child Nutr* 2013 Oct 7. doi: 10.1111/mcn.12090. [Epub ahead of print]

Heidkamp RA, Ayoya MA, Teta IN, Stoltzfus RJ, Marhone JP. Breastfeeding practices and child growth outcomes in Haiti: an analysis of data from the Demographic and Health Surveys. *Maternal Child Nutr* 2013 Aug 18. doi: 10.1111/mcn.12069. [Epub ahead of print]

Ag Ayoya M, Heidkamp RA, Teta I, Marhone J, Stoltzfus RJ. Progress in child nutrition in Haiti: Progress despite disasters. *Global Health Science and Practice* 2013; 1:389-96.

Jones A, Ickes S, Smith L, Mbuya M, Chasekwa B, Heidkamp R, Menon P, Zongrone A, Stoltzfus RJ. World Health Organization infant and young child feeding indicators and their associations with child growth: a synthesis of recent findings. *Maternal Child Nutr* 2014 Jan 10:1-17.

Heidkamp RA, Stoltzfus RJ, Fitzgerald DW, Pape JW. Growth in late infancy among HIV-exposed children in urban Haiti is associated with participation in a clinic-based infant feeding support intervention. *J Nutr*. 2012; 142:774-80.

Paul KH, Muti M, Madzima R, Humphrey JH, Stoltzfus RJ. Complementary feeding messages that target cultural barriers enhance the use of lipid-based nutrient supplements to improve infant diets in rural Zimbabwe. *Matern Child Nutr*. 2012; 8:225-38.

Kim SS, Habicht JP, Menon P, Stoltzfus RJ. How Do Programs Work to Improve Child Nutrition? Program Impact Pathways of Three Nongovernmental Organization Intervention Projects in the Peruvian Highlands. IFPRI Discussion Paper, July 2011.

<http://www.ifpri.org/sites/default/files/publications/ifpridp01105.pdf>

Stoltzfus RJ. Iron interventions for women and children in low-income countries. *J Nutr* 2011 Apr;141:756S-62S.

Pelletier DL, Frongillo EA, Gervais SG, Hoey L, Menon P, Ngo T, Stoltzfus RJ, Ahmed AMS, Ahmed T. Nutrition agenda setting, policy formulation and implementation: lessons from the mainstreaming nutrition initiative. *Health Policy Planning* 2011 Feb 3. [Epub ahead of print]

Paul KH, Muti M, Khalfan SS, Humphrey JH, Caffarella R, Stoltzfus RJ. Beyond food insecurity: how context can help improve complementary feeding interventions. *Food Nutr Bull* 2011; 32:244-53.

Mbuya MNN, Humphrey JH, Majo F, Chasekwa B, Jenkins A, Israel-Ballard K, Muti M, Paul KH, Madzima RC, Moulton LH, Stoltzfus RJ. Heat treatment of expressed breast milk is a feasible option for feeding HIV-exposed-uninfected children after 6 months of age in rural Zimbabwe. *J Nutr* 2010; 140:1481-8.

Young SL, Khalfan SS, Farag T, Kavle J, Rasmussen KM, Pelto GH, Tielsch J, Stoltzfus RJ. Association of pica with anemia and gastrointestinal distress among pregnant women in Zanzibar, Tanzania. *Am J Trop Med Hyg* 2010; 83: 144-51.

Ag Ayoya M, Garza C, Speikermann-Brouwer GM, Stoltzfus RJ, Nemeth E, Habicht JP, Ganz T, Rawat R, Traoré. Alpha-1-acid glycoprotein, hepcidin, C-reactive protein and serum ferritin are correlated in anemic school children with *Schistosoma haematobium*. *Am J Clin Nutr* 2010;91:1784-90.

Rawat R, Humphrey JH, Mutasa K, Stoltzfus RJ. Predicting adverse HIV related outcomes in a resource limited setting: use of the inflammation marker alpha-1-acid glycoprotein. *AIDS Research and Human Retroviruses* 2010; 26:1171-4.

Kung'u JK, Wright VJ, Haji HJ, Ramsan M, Goodman D, Tielsch JM, Bickle QD, Raynes JG, Stoltzfus RJ. Adjusting for the acute phase response is essential to interpret iron status indicators among young Zanzibari children prone to chronic malaria and helminth infections. *J Nutr* 2009; 139: 2124-31.

Rawat R, Humphrey JH, Ntozini R, Mutasa K, Iliff PJ, Stoltzfus RJ. Elevated iron stores are associated with HIV disease severity and mortality among post-partum women in Zimbabwe. *Public Health Nutr* 2009; 12:1321-9.

Kung'u J, Boor KJ, Ame SM, Ali NS, Jackson AE, Stoltzfus RJ. Bacterial populations in complementary foods and drinking-water in households with children 10-15 months old in Zanzibar, Tanzania. *J Health Pop Nutr* 2009 27:41-52.

Kung'u JK, Goodman D, Haji HJ, Ramsan M, Wright VJ, Bickle QD, Tielsch JM, Raynes JG, Stoltzfus RJ. Early helminth infections are inversely related to anemia, malnutrition and malaria and are not associated with inflammation in 6-23 month old Zanzibari children. *Am J Trop Med Hyg* 2009; 81:1062-70.

Paul KH, Dickin KL, Ali NS, Monterrosa EC, Stoltzfus RJ. Soy-rice based processed complementary food improves nutrient intakes in infants and is equally acceptable with or without added milk powder as assessed using Trials of Improved Practices in Pemba Island, Tanzania. *J Nutr* 2008; 138:1963-8.

Stoltzfus RJ. Research needed to strengthen science and programs for the control

of iron deficiency anemia and its consequences in young children. *J Nutr* 2008; 138: 2542-6.

Tielsch JM, Khattry SK, Stoltzfus RJ, Katz J, LeClerq SC, Adhikan R, Mullany LC, Black R, Shresta S. Effect of zinc supplementation on mortality in children aged 1-48 months: a community-based randomized placebo-controlled trial. *Lancet* 2007; 101:766-72.