was used compared with a less stringent case definition based on only radiographic features. This is a nice illustration of the conundrum in genetic epidemiology of whether it is better to have less misclassification error or a larger sample size. Through this well done and thorough study, we now have some intriguing leads to follow. More genes and single nucleotide polymorphisms will certainly follow through continued GWAS efforts and next-generation sequencing approaches. The challenge will be to connect the biology of these genes to the development and progression of osteoarthritis and to investigate the therapeutic potential of these pathways for disease prevention and treatment.

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MCH is a member of the scientific advisory board of TREAT-OA Consortium; the other authors declare that they have no conflicts of interest.


Challenges in ameliorating hunger while preventing obesity

In The Lancet, Gretchen Stevens and colleagues use innovative techniques to examine trends in child nutrition in 141 countries.¹ Despite substantial reductions in the prevalence of moderate and severe stunting and underweight in developing countries, about 30% of children younger than 5 years were moderately or severely stunted and 19% were moderately or severely underweight in 2011. For all countries, the predicted likelihood of achievement of the Millennium Development Goal (MDG) of halving hunger by 2015 was estimated at less than 5%. However, striking heterogeneity was noted between countries and regions; 61 of 141 countries had more than a 50% chance of reaching the MDG goal and four (Chile, China, Mexico, and Brazil) were almost certain to achieve the goal.

This heterogeneity emphasises the vastly different circumstances faced by children in low-income and middle-income countries. Barring radical change, children in the lowest-income countries (especially in the sub-Saharan African and South Asian regions), will continue to bear the enormous social, economic, health, and human capital costs of maternal and childhood undernutrition²–³ into the foreseeable future. Other areas, such as the Latin American and Caribbean (LAC) and Central Asian, Middle Eastern, North African (CAMENA) regions, have successfully reduced childhood underweight but simultaneously face rising overweight and obesity.⁴ For example, 35–60% of mothers from poor households in LAC and CAMENA countries are overweight or obese, rivalling rates seen in the wealthy LAC and CAMENA subpopulations.⁵,⁶ Even poor children in these middle-income countries will probably encounter environmental conditions that promote obesity. Thus, as policy moves forward to ameliorate hunger, care must be taken to prevent obesity at the same time.

Improvement in undernutrition in all nations, as Stevens and colleagues state,¹ is likely to come from equitable economic growth, and investment in infrastructures, technologies, and policies that improve agricultural productivity and earnings of smallholder
farmers, in addition to health-care and food programmes and improvements in access to clean water, sanitation, and hygiene. However, achievement of optimum growth through elimination of undernutrition without unduly increasing overweight and obesity will probably require strategies to be tailored to specific within-country contexts and subpopulations. For the poorest countries with persistent maternal and childhood undernutrition, lifelong evidence-based supplemental nutrition \(^7\) for the most susceptible populations might be needed. Furthermore, special emphasis on the time from conception until age 2 years is crucial in terms of promotion of short-term health, adequate growth and development,\(^8\) and reduction of risk from nutrition-related non-communicable chronic diseases later in life.\(^9\) However, for regions and countries where children are mostly fulfilling their weight-for-age potential, nutrition policies and programmes should be redesigned specifically to target undernourished children during critical periods when high-quality nutrition is most likely to improve length-for-age.

If lessons can be learnt from previous experience with supplemental nutrition programmes, low-income and middle-income countries might avoid trading the burden of undernutrition for that of overnutrition. Monitoring and prediction of global anthropometric trends, as presented by Stevens and colleagues,\(^1\) might signal the need for changes in nutrition programmes in countries that have succeeded in reducing the prevalence of underweight (eg, LAC and CAMENA regions). Cautionary examples of programmes originally designed to combat undernutrition that continued to supply energy-dense foods to children who mostly met weight-for-age criteria provide insight into practices that might unintentionally increase overweight. In Chile, supplementary feeding programmes reduced undernutrition but had a much stronger effect on weight-for-length (or weight-for-height) than on length-for-age (probably resulting from initiation of feeding after the prime opportunity for height recovery and from liberal criteria for risk), resulting in increased prevalence of overweight.\(^10\) In the USA, the Special Supplemental Nutrition Program for Women, Infants, and Children took decades to adjust to changing nutritional circumstances and revise the food package in an effort to prevent further increases in maternal and childhood obesity.\(^11\)

Presently, many low-income and middle-income countries have an epidemic of nutrition-related chronic diseases: more than 80% of deaths from non-communicable disease occur in developing countries.\(^12\) The dual burden of undernutrition and overnutrition at country level will challenge resource allocators to meet the needs of undernourished and overnourished populations simultaneously. The successful balance between reduction of hunger and curbing of rising obesity is a challenge. For instance, in a recent *Lancet* Series on Brazil, Victora and colleagues\(^13\) pointed to the strong health-sector reform underlying success in reduction of childhood undernutrition. However, overweight continues to rise in Brazil.\(^14\) In Mexico, the poverty alleviation programme, Oportunidades, improved children’s height-for-age and also transiently improved childhood overweight,\(^15\) but resulted in increases in overweight and high blood pressure in mothers.\(^16\) Clearly, there is difficult work ahead.

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We declare that we have no conflicts of interest.

Women Deliver: closing the gap for reproductive and maternal health—call for papers

Since the first Women Deliver conference was held in London in October, 2007, the world has seen a dramatic increase in attention, action, and investment towards achieving Millennium Development Goal 5 (MDG 5) to improve maternal health. Globally, the number of maternal deaths has dropped from 543 000 in 1990 to 287 000 in 2010, according to UN estimates,1 with enormous variations by country and by region. Although significant progress has been made, few developing countries are on track to achieve the overall targets set for MDG 5: to reduce maternal mortality by 75% by 2015 and to achieve universal access to reproductive health. Newborn health, which is intimately connected to women’s health and access to care during pregnancy and delivery, is improving at an even slower rate.

Women Deliver is a global advocacy organisation that brings together voices from around the world to call for action to improve the health and wellbeing of girls and women. The three core themes of the 2013 conference are: investment in women, meeting women’s need for contraception, and the new architecture for the development goals and the effect on reproductive health. More broadly, the conference will focus on the links between improving maternal health and other development goals, including education, environment, gender equity, human rights, reduction in child mortality, and the eradication of HIV/AIDS. Participants will include heads of state, researchers, the private sector, foundations, health professionals, and civil society organisations.

The Lancet is planning a special issue to coincide with the Women Deliver conference to be held in Kuala Lumpur, Malaysia, on May 28–30, 2013. We invite high quality submissions that address the themes of the conference and are from research groups working on reproductive, maternal, and newborn health globally. Manuscripts should be submitted via our online submission system by Dec 14, 2012. The bulk of manuscripts should follow the usual Lancet format for original research articles, but we will also consider case studies and other less research-oriented submissions, as seen in the blue and green sections of the journal. Please state in the cover letter that the submission is in response to this call for papers.

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