

MARIE T. RUEL

International Food Policy Research Institute
1201 I Street, NW
Washington, DC 20005 – USA

Tel.: (202) 862 5676
Fax: (202) 467 4439
email: m.ruel@cgiar.org

CURRENT POSITION

Director, Poverty, Health, and Nutrition Division, International Food Policy Research Institute, Washington, DC

Responsibilities include leadership and management of up to 100 staff members (including DC headquarters and country offices around the world); direct mentoring of senior research staff; fund-raising for - and supervising – program and policy research in the areas of social protection, poverty, food security, nutrition, gender, HIV/AIDs, and agriculture and health linkages; managing a budget of ~\$40 million per year; serving as member of IFPRI’s Senior Management Team; leading the flagship on integrated programs and policies in the IFPRI-led CGIAR research program on Agriculture for Nutrition and Health; and founding and chairing IFPRI’s Ethics Institutional Review Board (2004-2010).

EDUCATION

- | | |
|------|--|
| 1990 | Ph.D. International Nutrition (minors: agricultural economics; epidemiology)
Cornell University, Ithaca, NY |
| 1982 | M.S. Masters in Health Sciences, Nutrition
Laval University, Québec, Canada |
| 1982 | C.E.C. Certificat en Enseignement collégial (Teaching Certificate)
Laval University, Québec, Canada |
| 1976 | B.S. Bachelor in Health Sciences, Dietetics
Laval University, Québec, Canada. |

PAST POSITIONS

- | | |
|-------------|---|
| 2001 – 2004 | Senior Research Fellow
International Food Policy Research Institute, Washington, DC <ul style="list-style-type: none">• Leader of a Global Regional Project on Diet Quality and Diet Changes of the Poor (2003-2004) |
| 1996 – 2001 | Research Fellow
International Food Policy Research Institute, Washington, DC <ul style="list-style-type: none">• Leader of Multi-country Research Program (MP) on Challenges to Urban Food Security and Nutrition (1996-2003). |

- Co-leader of a multi-country research program on micronutrients, with special emphasis on food based approaches and policy research (1996-2003).

1993 – 1996	Director, Health and Nutrition Division Institute of Nutrition of Central America and Panama/Pan American Health Organization (INCAP/PAHO)
1990 – 1993	Epidemiologist/nutritionist Institute of Nutrition of Central America and Panama/Pan American Health Organization (INCAP/PAHO)
1985 – 1987	Field Director, Growth monitoring and Nutrition Education Project in Lesotho, Southern Africa Joint Programme Cornell Nutritional Surveillance Program and UNICEF-Eastern and Southern Africa
1979 – 1980	Field Director, Comparison of two types of powdered milk on the immune response of malnourished Haitian children, Haiti Laval University, Department of Nutrition

PROFESSIONAL ACTIVITIES

1996 – 1997	Elected member of the Institute of Medicine's Committee on International Nutrition: Served on the Vitamin C in Food Aid Commodities committee (Institute of Medicine of the National Academy of Sciences)
1996 – 1998	Member of the Executive Committee of the Society for International Nutrition Research
1998 – present	Member of the International Union of Nutritional Sciences (IUNS)-Committee II/3 (Committee on Urbanization and Nutrition)
2000 – 2013	Elected member of the International Zinc for Nutrition Consultative Group (IZiNCG)
2008 – present	Elected member of Helen Keller International (HKI)'s Program Advisory Committee (PAC)
2009 – present	Member of the High Level Technical Group (GTAN) of the Study on the "Nutritional Dimensions of Social Protection Networks in Central America and the Dominican Republic" convened by the World Food Program (WFP), Regional office for Latin America and the Caribbean
2010 – 2012	Elected member of a planning committee for two workshops organized by the National Academies' Roundtable on Science and Technology focused on global food security.
2010 – present	Elected member of the Independent Advisory Panel for the Access to Nutrition Index (ATNI) established by the Global Alliance for Nutrition (GAIN)

2010 – 2012	Elected member of High Level Nutrition Advisory Group for the Millennium Villages Project
2011 – present	Leverhulme Center for Integrated Agriculture and Health (LCIRAH) Advisory Group
2011 – 2014	External Advisory Group of a European Commission’s Project: SMILING (Sustainable Micronutrient Interventions to Control Deficiencies and Improve Nutritional Status and General Health in Asia)
2011 – 2014	Independent Advisory Panel for GAIN-ATNI (Access to Nutrition Index)
2012 – present	Member of Micronutrient Forum Steering Committee
2012 – 2013	Editorial Book Member DSM book on Nutrition Security
2014 – 2015	Founding Member of International Society for Implementation Science in Nutrition
2015 – present	Elected Councilor Research Agenda Support, Society for Implementation Sciences in Nutrition
2015 – present	Member of Scientific Advisory Group for the Adolescent Nutrition Initiative of the Sackler Institute
2015 – present	Member of Children’s Investment Fund Foundation (CIFF) Advisory Group
2015 – present	IMMANA Steering Group

PEER REVIEWER FOR:

Journals: Appetite, American Journal of Clinical Nutrition, European Journal of Clinical Nutrition, Food Policy, Food and Nutrition Bulletin, Health Policy and Planning, International Journal of Public Health, Journal of Development Studies, Journal of Nutrition, Lancet, Pediatrics, PLoS Medicine, Public Health Nutrition, World Development, Salud Pública de Mexico, World Health Organization (WHO) Bulletin.

Research proposals, books, reports abstracts for international conferences: proposals for AID Child Survival Program (1996-98); book for UNU-WIDER; book for Instituto Nacional de Salud Pública, Mexico; report for Mainstreaming Nutrition in Maternal and Child Health project for ICDDR,B; report for SUSTAIN; abstracts for Global Health Council, Experimental Biology, International Union of Nutritional Sciences, 3ie (International Initiative on Impact Evaluation).

TEACHING EXPERIENCE

Professor, Epidemiology, Masters in Nutrition, University of San Carlos/INCAP, Guatemala

- Elaboration of the curriculum for 2 Epidemiology courses: Introductory and Advanced
- Teaching the Advanced Nutritional Epidemiology course
- Advisor to 3 graduate students (1994-1995)

Assistant Visiting Professor, School of Public Health, Emory University (1995)

Teaching Assistant, Cornell University; Graduate courses:

- Advanced Epidemiology (1987 and 1989)
- Methods for Conducting Meta-Analyses (1989)

Teaching Assistant, Laval University;

- Diet Therapy (1976)
- Quantity Food Production, Administration of Food Production Systems (1979-1980)

CONSULTANCIES

- UNICEF-NYHQ Evaluation Office (January 1993)
Supervisor: Neil Andersson
Country: Mozambique
 - Assistance in Sentinel Community Surveillance process
 - Analysis of data, preparation of report
 - Training of nationals in data analysis, interpretation and diffusion of information.
- UNICEF-NYHQ Evaluation Office (November 1992)
Supervisors: Neil Andersson/Roger Pearson
Country: Mexico
 - Participation in International Meeting on the Sentinel Sites Surveillance Systems
- University of Moncton (Cooperation program in nutrition) – CIDA – Nicaragua:
Supervisor: Dr. Micheline Beaudry.
 - Participated in Nutritional Surveillance Workshop (1982)
 - Carried out a review of iron deficiency anemia in infants: diagnosis and possibilities for intervention (1982)
 - Gave seminars on Vitamin A deficiency in Managua, Nicaragua (1983)
 - Organized and led a Workshop on “Program Planning for the Control of Vitamin A Deficiency in Nicaragua”
 - Analyzed the nutritional programs of the Ministries of Education and of Agriculture and formulated recommendations for the integration of the two programs
- World Health Organization (WHO)
 - Department of Child and Adolescent Health and Development: development of indicators of child feeding practices (2002)
 - Department of Nutrition for Health and Development: participated in Expert Consultation on Fortification and in preparing a Technical Document to Develop Guidelines on Food Fortification (1982).

PUBLICATIONS

Peer-Reviewed Journal Articles, IFPRI Research Reports/Monographs and Briefs, Book Chapters

1. Dillon, J. C., Heurteloup-Villesaint, **M. T. Ruel**, and L. Lemieux. 1983. Effet du préchauffage du lait écrémé avant évaporation sur l'antigénécité des protéines bovines chez le jeune enfant. *Journal de l'Institut Canadien et Technologie Alimentaire*.
2. **Ruel, M. T.**, and J. C. Dillon. 1983. Aspects cliniques et biochimiques de l'aribofoflavinose en Haiti. *Annals of Nutrition and Metabolism* 27 (4): 306–312.
3. **Ruel, M. T.**, D. Pelletier, J.-P. Habicht, J. B. Mason, C. S. Chobokoane, and A. P. Maruping. 1990. A comparison of mothers' understanding of two growth charts in Lesotho. *Bulletin of the World Health Organization* 68 (4): 483–491.
4. **Ruel, M. T.**, D. Pelletier, J.-P. Habicht, J. B. Mason, C. S. Chobokoane, and A. P. Maruping. 1991. Comparison of two growth charts in Lesotho: Health workers' ability to understand and use them for action. *American Journal of Public Health* 81 (5): 610–616.
5. **Ruel, M. T.**, and J.-P. Habicht. 1992. Growth charts only marginally improved maternal learning from nutrition education and growth monitoring in Lesotho. *Journal of Nutrition* 122 (9): 1772–1780.
6. **Ruel, M. T.**, and J.-P. Habicht. 1992. The correct use of growth charts. Letter to the Editor. *American Journal of Public Health* 82 (6): 898–899.
7. **Ruel, M. T.**, J.-P. Habicht, and C. Olson. 1992. Impact of a clinic-based growth monitoring programme on maternal nutrition knowledge in Lesotho. *International Journal of Epidemiology* 21 (1): 59–65.
8. **Ruel, M. T.**, J.-P. Habicht, P. Pinstrup-Andersen, and Y. Gröhn. 1992. The mediating effect of maternal nutrition knowledge on the association between maternal schooling and child's nutritional status in Lesotho. *American Journal of Epidemiology* 135 (8): 904–914.
9. Rivera, J., R. Martorell, **M. T. Ruel**, J.-P. Habicht, and J. Haas. 1992. Efectos de la suplementación alimentaria temprana en el tamaño y la composición corporal del adolescente. *Archivos Latinoamericanos de Nutrición* 42: 34S–36S.
10. **Ruel, M. T.**, J. Rivera, H. Castro, J.-P. Habicht, and R. Martorell. 1992. Secular trends in adult and child anthropometry in four villages of Guatemala. *Food and Nutrition Bulletin* 14 (3): 246–253.
11. Martorell, R., J. A. Rivera, D. G. Schroeder, U. Ramakrishnan, E. Pollitt, and **M. T. Ruel**. 1995. Consecuencias a largo plazo del retardo en el crecimiento durante la niñez. *Archivos Latino Americanos de Nutrición* 45 (1-S): 109-S–113-S.
12. Rivera, J., R. Martorell, **M. T. Ruel**, J.-P. Habicht, and J. Haas. 1995. Nutritional supplementation during the preschool years and body size and composition in Guatemalan adolescents. *Journal of Nutrition* 125 (5 supplement): 1068S–1077S.
13. **Ruel, M. T.**, J. Rivera, and J.-P. Habicht. 1995. Length screens better than weight in stunted populations. *Journal of Nutrition* 125 (5): 1222–1228.
14. **Ruel, M. T.**, J. Rivera, J.-P. Habicht, and R. Martorell. 1995. Differential response to early nutrition supplementation: Long-term effects on height at adolescence. *International Journal of Epidemiology* 24 (3): 402–412.

15. Schroeder, D., R. Martorell, J. Rivera, **M. T. Ruel**, and J.-P. Habicht. 1995. Age differences in the impact of supplementation on growth. *Journal of Nutrition* 125 (5 supplement): 1060S–1067S.
16. **Ruel, M. T.** 1995. Child growth monitoring as an educational tool, an integrating strategy and a source of information: A review of experience. In *Child growth and nutrition in developing countries. Priorities for action*, ed. P. Pinststrup-Andersen, D. Pelletier, and H. Alderman, chapter 5, 78–96. Ithaca, N.Y.: Cornell University Press.
17. **Ruel, M. T.**, J.-P. Habicht, K. Rasmussen, and R. Martorell. 1996. Screening for nutritional interventions: The risk or the benefit approach? *American Journal of Clinical Nutrition* 63 (5): 671–677.
18. Bentley, M. E., L. E. Caulfield, M. Ram, M. C. Santizo, E. Hurtado, J. A. Rivera, **M. T. Ruel**, and K. H. Brown. 1997. Zinc supplementation affects the activity patterns of rural Guatemalan infants. *Journal of Nutrition* 127 (7): 1333–1338.
19. Casterline, J. E., L. H. Allen, and **M. T. Ruel**. 1997. Vitamin B-12 deficiency in lactating Guatemalan women and their infants. *Journal of Nutrition* 127 (10): 1966–1972.
20. Engle, P. L., E. Hurtado, and **M. T. Ruel**. 1997. Smoke exposure of women and young children in highland Guatemala: Prediction and recall accuracy. *Human Organization* 56 (4): 408–417.
21. Rivera, J., and **M. T. Ruel**. 1997. Growth retardation starts in the first few months of life in rural Guatemala. *European Journal of Clinical Nutrition* 51 (2): 92–96.
22. Romieu, I., M. Hernandez-Avila, J. A. Rivera, **M. T. Ruel**, and S. Parra. 1997. Dietary studies in countries experiencing health transition. *American Journal of Clinical Nutrition* 65 (4 supplement): 1159S–1165S.
23. **Ruel, M. T.**, J. Rivera, K. H. Brown, and B. Lönnerdal. 1997. Impact of zinc supplementation on morbidity from diarrhea and respiratory infections among rural Guatemalan children. *Pediatrics* 99 (6): 808–813.
24. **Ruel, M. T.**, K. G. Dewey, C. Martinez, R. Flores, and K. H. Brown. 1997. Validation of single daytime samples of human milk to estimate the 24-hour concentration of lipids among urban Guatemalan mothers. *American Journal of Clinical Nutrition* 65 (2): 439–444.
25. Rivera, J. A., **M. T. Ruel**, M. C. Santizo, K. H. Brown, and B. Lönnerdal. 1998. Zinc supplementation improves the growth of stunted rural Guatemalan infants. *Journal of Nutrition* 128 (3): 556–562.
26. **Ruel, M. T.**, and H. Bouis. 1998. Plant breeding: a long-term strategy for the control of zinc deficiency in vulnerable populations. *American Journal of Clinical Nutrition* 68 (2S): 488S–494S.
27. Garrett, J. L., and **M. T. Ruel**. 1999. Are determinants of rural and urban food security and nutritional status different? Some insights from Mozambique. *World Development* 27 (11): 1955–1975.
28. Garrett, J. L., and **M. T. Ruel**. 1999. Food and nutrition in an urbanizing world. *Choices*, Special Millennium Issue, Fourth Quarter: 12–17.
29. Haddad, L. J., **M. T. Ruel**, and J. L. Garrett. 1999. Are urban poverty and undernutrition growing? Some newly assembled evidence. *World Development* 27 (11): 1891–1904.
30. Levin, C. E., **M. T. Ruel**, S. S. Morris, D. G. Maxwell, M. Armar-Klemesu, and C. Ahiadeke. 1999. Working women in an urban setting: Traders, vendors, and food security in Accra. *World Development* 27 (11): 1977–1991.
31. Morris, S. S., C. E. Levin, M. Armar-Klemesu, D. G. Maxwell, and **M. T. Ruel**. 1999. Does geographic targeting of nutrition interventions make sense in cities? Evidence from Abidjan and Accra. *World Development* 27 (11): 2011–2019.

32. Morris, S. S., **M. T. Ruel**, R. J. Cohen, K. G. Dewey, L. H. Allen, H. Bouis, and N. Hassan. 1999. Precision, accuracy and reliability of hemoglobin assessment. *American Journal of Clinical Nutrition* 69 (6): 1243–1248.
33. **Ruel, M. T.**, and J. L. Garrett. 1999. Overview. (Special issue of *World Development* on “Urban Challenges to Food and Nutrition Security in the Developing World.”) *World Development* 27 (11): 1885–1889.
34. **Ruel, M. T.**, L. J. Haddad, and J. L. Garrett. 1999. Some urban facts of life: Implications for research and policy. *World Development* 27 (11): 1917–1938.
35. **Ruel, M. T.**, C. E. Levin, M. Armar-Klemesu, D. G. Maxwell, and S. S. Morris. 1999. Good care practices mitigate the negative effects of poverty and low maternal schooling on children’s nutritional status: Evidence from Accra. *World Development* 27 (11): 1993–2009.
36. Zinc Investigators’ Collaborative Group (R. Black, Z. Bhutta, K. Brown, J. Gardner, S. Gore, A. Hidayat, F. Khatun, R. Martorell, N. Ninh, M. Penny, J. Rosado, S. Roy, **M. Ruel**, S. Sazawal, A. Shankar). 1999. Prevention of diarrhea and acute lower respiratory infection by zinc supplementation in developing country children: Pooled analysis of randomized controlled trials. *Journal of Pediatrics* 135 (6): 689–697.
37. Armar-Klemesu, M., **M. T. Ruel**, D. Maxwell, C. E. Levin, and S. S. Morris. 2000. Poor maternal schooling is the main constraint to good child care practices in Accra. *Journal of Nutrition* 130 (6): 1597–1607.
38. Menon, P., **M. T. Ruel**, and S. S. Morris. 2000. Socio-economic differentials in child stunting are consistently larger in urban than rural areas: Analysis of 10 DHS data sets. *Food and Nutrition Bulletin* 21 (3): 282–289.
39. **Ruel, M. T.** 2000. Urbanization in Latin America: Constraints and opportunities for child feeding and care. *Food and Nutrition Bulletin* 21 (1): 12–24.
40. Zinc Investigators Collaborative Group (R. Black, Z. Bhutta, K. Brown, J. Gardner, S. Gore, A. Hidayat, F. Khatun, R. Martorell, N. Ninh, M. Penny, J. Rosado, S. Roy, **M. Ruel**, S. Sazawal, A. Shankar). 2000. Therapeutic effects of oral zinc in acute and persistent diarrhea in children in developing countries: pooled analysis of randomized controlled trials. *American Journal of Clinical Nutrition* 72 (6): 1516–1522.
41. Garrett, J. L., and **M.T. Ruel**, eds. 2000. *Achieving urban food and nutrition security in the developing world*. 2020 Vision Focus 3. Washington, D.C.: International Food Policy Research Institute.
42. Maxwell, D., C. Levin, M. Armar-Klemesu, **M. Ruel**, S. Morris, and C. Ahiadeke. 2000. *Urban livelihoods, food and nutrition security in greater Accra*. Research Report 112. Washington, D.C.: International Food Policy Research Institute.
43. **Ruel, M. T.** 2001. The natural history of growth failure: importance of intrauterine and postnatal periods. In *Nutrition and growth*, ed. R. Martorell and F. Haschke, 123–158. Nestlé Nutrition Workshop Series, Pediatric Program, vol. 47. Philadelphia: Nestec Ltd., Vevey/Lippincott Williams & Wilkins.
44. **Ruel, M. T.** 2001. *Can food-based strategies help reduce vitamin A and iron deficiencies? A review of recent evidence*. Food Policy Review #5. Washington, D.C.: International Food Policy Research Institute.
45. **Ruel, M. T.**, and H. E. Bouis. 2001. Food modifications and impact on nutrition. In *Encyclopedia for life support systems (EOLSS)*. Oxford.
46. **Ruel, M. T.**, and C. E. Levin. 2001. Food-based approaches. In *Nutritional anemias*, ed. U. Ramakrishnan, 185–214. CRC Series in Modern Nutrition. Boca Raton, Fla.: CRC Press.

47. Ruel, **M. T.**, L. Haddad, and J. L. Garrett. 2001. Rapid urbanization and the challenges of obtaining food and nutrition security. In *Nutrition and health in developing countries*, ed. R. D. Semba and M. Bloem, 465–482. Totowa, N.J.: Humana Press.
48. **Ruel, M. T.** 2001. Do subsidized child care programmes work? An operations evaluation. *Food, Nutrition and Agriculture* 29: 44–52.
49. **Ruel, M. T.**, and C. Levin. 2002. Food-based approaches for alleviating micronutrient malnutrition: An overview. In *Food systems for improved human nutrition: Linking agriculture, nutrition and productivity*, ed. P. Kataki and S. Babu, 31–53. New York, London, Oxford: Food Products Press, the Haworth Press, Inc.
50. **Ruel, M. T.**, and M. Arimond. 2002. Spot-check observations for assessing hygiene practices: Review of experience and implications for programs. *Journal of Health, Population and Nutrition* 20 (1): 65–76.
51. **Ruel, M. T.**, and C. Levin. 2002. Food-based approaches for alleviating micronutrient malnutrition: An overview. *Journal of Crop Production* 6 (1/2): 31–54.
52. **Ruel, M. T.**, and P. Menon. 2002. Child feeding practices are associated with child nutritional status in Latin America: Innovative uses of the Demographic and Health Surveys. *Journal of Nutrition* 132 (6): 1180–1187.
53. **Ruel, M. T.** 2003. *The Guatemala Community Daycare Program: Effective food aid targeting in urban areas*. IFPRI/WFP Brief—Linking Research and Action. Strengthening Food Assistance and Food Policy Research. Washington, D.C.: International Food Policy Research Institute.
54. **Ruel, M. T.**, and M. Arimond. 2003. *Developments in measuring care, and implications for programs*. Food Policy Review Series #6. Washington, D.C.: International Food Policy Research Institute.
55. **Ruel, M. T.**, B. de la Brière, K. Hallman, A. R. Quisumbing, and N. Coj de Salazar. 2003. Child care and working women in urban Guatemala. In *Household decisions, gender, and development. A synthesis of recent research*, ed. A. R. Quisumbing, 219–224. Washington, D.C.: International Food Policy Research Institute.
56. **Ruel, M. T.** 2003. Progress in developing indicators to measure complementary feeding practices. In Meeting the challenge to improve complementary feeding, A. D. Moreira. *SCN News* 27: 20–22.
57. **Ruel, M. T.** 2003. Operationalizing dietary diversity: A review of measurement issues and research priorities. *Journal of Nutrition* 133 (11, supplement): 3911S–3926S.
58. **Ruel, M. T.**, K. H. Brown, and L. E. Caulfield. 2003. Moving forward with complementary feeding: Indicators and research priorities. *Food and Nutrition Bulletin* 24 (3): 289–290.
59. **Ruel, M. T.**, and M. Arimond. 2004. Dietary diversity and growth: An analysis of recent demographic and health surveys. In *Food-based approaches for a healthy nutrition in West Africa*, ed. I. D. Brouwer, A. S. Traoré, and S. Trèche, 167–182. Proceedings of the 2nd International Workshop, Ouagadougou, November 23–28, 2003. Ouagadougou, Burkina Faso: Presses Universitaires.
60. Arimond, M., and **M. T. Ruel**. 2004. Dietary diversity is associated with child nutritional status: Evidence from 11 demographic and health surveys. *Journal of Nutrition* 134 (10): 2579–2585.
61. International Zinc Nutrition Consultative Group (IZiNCG Steering Committee: Z. Bhutta, K. H. Brown, R. S. Gibson, J. C. King, J. A. Rivera, B. Lönnerdal, **M. T. Ruel**, B. Sandstrom, and E. Wasantwisut). 2004. Assessment of the risk of zinc deficiency in populations and options for its control. C. Hotz and K. H. Brown, guest editors). *Food and Nutrition Bulletin* 25 (1) (supplement 2): S91-S294.

62. Neufeld, L. M., J. D. Haas, **M. T. Ruel**, R. Grajeda, and L. P. Naeher. 2004. Smoky indoor cooking fires are associated with elevated hemoglobin concentration in iron-deficient women. *Revista Panamericana de Salud Pública (Pan American Journal of Public Health)* 15 (2): 110–118.
63. **Ruel, M. T.**, and J. Garrett. 2004. Features of urban food and nutrition security and considerations for successful urban programming. *Electronic Journal of Agriculture and Development Economics* 1 (2): 242–271.
64. **Ruel, M. T.**, P. Menon, C. Loechl, and G. Pelto. 2004. Donated fortified cereal blends improve the nutrient density of traditional complementary foods in Haiti, but iron and zinc gaps remain for infants. *Food and Nutrition Bulletin* 25 (4): 361–376.
65. Garrett, J. and **M. T. Ruel**. 2005. Stunted child-overweight mother pairs: Prevalence and association with economic development and urbanization. *Food and Nutrition Bulletin* 26 (2): 209–221.
66. Garrett, J., and **M. T. Ruel**. 2005. The coexistence of child undernutrition and maternal overweight: Prevalence, hypotheses, and programme and policy implications. *Maternal and Child Nutrition* 1 (3): 185–196.
67. Hallman, K., A. Quisumbing, **M. Ruel**, and B. de la Brière. 2005. Mother's work and child care: Findings from the urban slums of Guatemala City. *Economic Development and Cultural Change* 53 (4): 855–886.
68. Hawkes, C., C. Eckhardt, **M. Ruel**, and N. Minot. 2005. Diet quality, poverty and food policy: A new research agenda for obesity prevention in developing countries. *SCN News* 29: 20–22.
69. Smith, L. C., **M. T. Ruel**, and A. Ndiaye. 2005. Why is child malnutrition lower in urban than rural areas? Evidence from 36 developing countries. *World Development* 33 (8): 1285–1305.
70. Hawkes, C., and **M. T. Ruel**. 2006. The links between agriculture and health: An intersectoral opportunity to improve the health and livelihoods of the poor. *Bulletin of the World Health Organization* 84 (12): 984–990.
71. Hawkes, C., and **M. T. Ruel**, eds. 2006. Understanding the links between agriculture and health. 2020 Vision Focus 13. Washington, D.C.: International Food Policy Research Institute.
72. Hawkes, C., and **M. T. Ruel**. 2006. Overview. In *Understanding the links between agriculture and health*. Series 2020 Vision Focus Brief Series Number 13(1). Washington, D.C.: International Food Policy Research Institute.
73. Hawkes, C., and **M. T. Ruel**. 2006. Agriculture and nutrition linkages: Old lessons and new paradigms. In *Understanding the links between agriculture and health*. Series 2020 Vision Focus Brief Series Number 13(1). Washington, D.C. International Food Policy Research Institute.
74. **Ruel, M. T.** A. Quisumbing, K. Hallman, and B. de la Brière. 2006. *The Guatemala Community Day Care Program: An example of effective urban programming*. Research Report 144. Washington, D.C.: International Food Policy Research Institute.
75. **Ruel, M. T.** 2006. Monitoring and evaluation. In *Guidelines for fortification with micronutrients*, ed. L. Allen, B. de Benoist, O. Dary, and R. Hurrell. Geneva: World Health Organization/Food and Agriculture Organization of the United Nations.
http://www.who.int/nutrition/publications/guide_food_fortification_micronutrients.pdf
76. Hawkes, C., **M. Ruel**, and S. Babu, eds. 2007. Linkages between agriculture and health in science, policy, and practice. *Food and Nutrition Bulletin* 28 (2) (supplement): S221–S226.

77. Hawkes, C., **M. Ruel**, and S. Babu. 2007. Agriculture and health: Overview, themes, and moving forward. *Food and Nutrition Bulletin* 28 (2): S221–S226.
78. Menon, P., **M. T. Ruel**, C. U. Loechl, M. Arimond, J.-P. Habicht, G. Pelto, and L. Michaud. 2007. Micronutrient sprinkles reduce anemia among 9- to 24-mo-old children when delivered through an integrated health and nutrition program in rural Haiti. *Journal of Nutrition* 137 (4): 1023–1030.
79. Pachon, H., K. B. Simondon, S. T. Fall, P. Menon, **M. T. Ruel**, C. Hotz, H. Creed-Kanashiro, B. Arce, M. R. L. Dominguez, E. A. Frongillo, and D. L. Brown. 2007. Constraints on the delivery of animal-source foods to infants and young children: Case studies from five countries. *Food and Nutrition Bulletin* 28 (2): 215–229.
80. Quisumbing, A. R., K. Hallman, and **M. T. Ruel**. 2007. Maquiladoras and market mamas: Women’s work and childcare in Guatemala City and Accra. *Journal of Development Studies* 43 (3): 420–455.
81. Randolph, T. F., E. Schelling, D. Grace, C. F. Nicholson, J. L. Leroy, D. Peden, D. C. Cole, M. W. Demment, A. Omere, J. Zinsstag, and **M. Ruel**. 2007. Invited Review: Role of livestock in human nutrition and health for poverty reduction in developing countries. *Journal of Animal Science* 85 (11): 2788–2800.
82. Coitinho, D. C., J. A. Rivera, R. Uauy, Z. Y. Ding, **M. T. Ruel**, and P. G. Svensson. 2008. Emerging nutrition challenges: Policies to tackle undernutrition, obesity, and chronic diseases. *World Hospital Health Service* 44 (3): 45–48.
83. Eckhardt, C., L. E. Torheim, E. Monterrubio, S. Barquera, and **M. T. Ruel**. 2008. The overlap of overweight and anaemia among women in three countries undergoing the nutrition transition. *European Journal of Clinical Nutrition* 62 (2): 238–246.
84. Menon, P., M. Mbuya, J.-P. Habicht, G. Pelto, C. U. Loechl, and **M. T. Ruel**. 2008. Assessing supervisory and motivational factors in the context of a program evaluation in rural Haiti. *Journal of Nutrition* 138 (3): 634–637.
85. Moursi, M. M., M. Arimond, K. G. Dewey, S. Treche, **M. T. Ruel**, and F. Delpeuch. 2008. Dietary diversity is a good predictor of the micronutrient density of the diet of 6-to-23-month-old children in Madagascar. *Journal of Nutrition* 138 (12): 2448–2453.
86. **Ruel, M. T.** 2008. Addressing the underlying determinants of undernutrition: Examples of successful integration of nutrition in poverty-reduction and agriculture strategies. *SCN News* 36: 21-29.
87. **Ruel, M. T.**, P. Menon, J.-P. Habicht, C. Loechl, G. Bergeron, G. Pelto, M. Arimond, J. Maluccio, L. Michaud, and B. Hankebo. 2008. Age-based preventive targeting of food assistance and behaviour change communication for reduction of childhood undernutrition in Haiti: A cluster randomized trial. *The Lancet* 371: 588–595.
88. **Ruel, M.**, and J. Hoddinott. 2008. *Investing in early childhood nutrition*. IFPRI Policy Brief 8. Washington, D.C.: International Food Policy Research Institute <http://www.ifpri.org/pubs/bp/bp008.asp#read>
89. **Ruel, M. T.**, J. L. Garrett, and L. Haddad. 2008. Rapid urbanization and the challenges of obtaining food and nutrition security. In *Nutrition and health in developing countries*, 2nd edition, ed. R. D. Semba and M. Bloem, 639–656. Totowa, N.J.: Humana Press.
90. Hawkes, C., and **M.T. Ruel**. 2008. From Agriculture to Nutrition. Pathways, Synergies and Outcomes. Agriculture and Rural Development Notes. Issue 40, World Bank.
91. Leroy, J. L., **M. Ruel**, and E. Verhofstadt. 2009. The impact of conditional cash transfer programmes on nutrition: A review of evidence using a programme theory framework. *Journal of Development Effectiveness* 1 (2): 1–27.

92. Loechl, C., P. Menon, M. Arimond, **M. T. Ruel**, G. Pelto, J.-P. Habicht, and L. Michaud. 2009. Using programme theory to assess the feasibility of delivering micronutrient Sprinkles through a food-assisted maternal and child health and nutrition programme in rural Haiti. *Maternal and Child Nutrition* 5 (1): 33–48.
93. Olney, D. K., A. Talukder, L. L. Iannotti, **M. T. Ruel**, and V. Quinn. 2009. Assessing impact and impact pathways of a homestead food production program on household and child nutrition in Cambodia. *Food and Nutrition Bulletin* 30 (4). 355-369
94. Hawkes, C., and **M. T. Ruel**. 2009. The links between agriculture and health: An intersectoral opportunity to improve the health and livelihoods of the poor. In *Science, technology and innovation for public health in Africa*, ed. F. A. Kalua, A. Awotedu, L. A. Kamwanja, and J. D. K. Saka. Monograph, 111–122. Pretoria, South Africa: NEPAD Office of Science and Technology.
95. Iannotti, L., Cunningham, K., and Ruel, M. 2009. Diversifying into healthy diets: Homestead food production in Bangladesh. In *Millions Fed: Proven Successes in Agricultural Development*, ed. D. J. Spielman and R. Pandya-Lorch. Washington, D.C.: International Food Policy Research Institute.
96. **Ruel, M.T.**, J. Garrett, C. Hawkes, and M.J. Cohen. 2010. The food, fuel, and financial crises affect the urban and rural poor disproportionately: a review of the evidence. *Journal of Nutrition* 140 (1): 170S-176S.
97. **Ruel, M.T.** 2010. The Oriente study: program and policy impacts. *Journal of Nutrition* 140: 415-418.
98. Donegan, S., Maluccio, J.A., Myers, C.K., Menon, P., **Ruel, M.T.**, and J.P. Habicht. 2010. Two food-assisted maternal and child health nutrition programs helped mitigate the impact of economic hardship on child stunting in Haiti. *Journal of Nutrition* 140: 1139-1145, 2010.
99. **Ruel, M.T.**, Deitchler, M., and M. Arimond. 2010. Developing simple measures of women’s diet quality in developing countries: overview. *Journal of Nutrition* 140: 140: 2048S-2050S.
100. Von Braun J, Ruel MT, Gillespie S. 2010. Bridging the Gap: Linking Agriculture and Health to Achieve the Millennium Development Goals. In: *The African food system and its interaction with human health and nutrition*, ed. P. Pinstруп-Andersen, 270-303. Ithaca, NY and London: Published in cooperation with United Nations University, Cornell University Press.
101. Hawkes, C. and **M Ruel**. 2010. Changing global diets: implications for agriculture. In: *The International Dimension of the American Society of Agronomy: Historical Perspectives, Current Issues, and Future Challenges*, ed. B. Payne and J. Ryan Madison, WI: American Society of Agronomy.
102. Nguyen, P. H., Menon P., **Ruel, M. T.**, and N. Hajeerhoy. 2011. A situational review of infant and young child feeding practices and interventions in Viet Nam. *Asia Pacific Journal of Clinical Nutrition* 20 (3).
103. Lutter, C., Daelmans, B., de Onis, M., Kothari, M., **Ruel, M. T.**, Arimond, M., Deitchler, M., Dewey, K., Blössner, M., and E. Borghi, 2011. Undernutrition, Poor Feeding Practices, and Low Coverage of Key Nutrition Interventions. *Journal of Pediatrics*; originally published online November 7, 2011; DOI: 10.1542/peds.2011-1392.
104. Arimond, M., C. Hawkes, **M. T. Ruel**, Z. Zifri, P. Berti, J. Leroy, J. W. Low, L. Brown, and E. Frongillo. 2011. Agricultural interventions and nutrition outcomes: Lessons from the past and new evidence. In: *Combating Micronutrient Deficiencies: Food-based Approaches*, ed. B. Thompson and L. Amoroso, 41-75. Rome: FAO; Wallingford: CAB International.

105. Hawkes, C. and **M. Ruel**. *Value Chains for Nutrition*. 2020 Conference “Leveraging Agriculture for Improving Nutrition and Health”. 2020 Conference Paper 4. International Food Policy Research Institute, Washington, DC, February 2011.
106. Hawkes, C. and **M.T. Ruel**. *Value Chains for Nutrition*. 2020 Conference “Leveraging Agriculture for Improving Nutrition and Health”. 2020 Conference Brief 4. International Food Policy Research Institute, Washington, DC, February 2011.
107. Von Braun, J., **M.T. Ruel** and S. Gillespie. *Bridging the Gap between the Agriculture and Health Sectors*. 2020 Conference “Leveraging Agriculture for Improving Nutrition and Health”. 2020 Conference Brief 14. International Food Policy Research Institute, Washington, DC, February 2011.
108. Olney, D., Rawat, R., and **M.T. Ruel**. 2012. Identifying Potential Programs and Platforms to Deliver Multiple Micronutrient Interventions. *Journal of Nutrition* 142: 178S–185S, 2012.
109. Murphy, S., **M. Ruel** and A. Carriquiry. 2012. Should HCES be used for nutritional assessment and planning? *Food and Nutrition Bulletin* 3(3)(supplement): S235-S241.
110. Nabarro, D., P. Menon, **M. Ruel** and S. Yosef. 2012. Scaling Up Nutrition (SUN): a global movement to accelerate progress in reducing maternal and child Nutrition. In: IFPRI 2020 Focus Briefs Series 19 on: Scaling Up for Effective Agriculture and Rural Development, Brief 9.
111. Hawkes, C. and **M.T. Ruel**. *Value Chains for Nutrition*. In: *Reshaping Agriculture for Nutrition and Health*. Fan, S. and R. Pandya-Lorch, eds. Chapter 9. IFPRI 2020 Conference book. International Food Policy Research Institute, Washington, DC, February 2012.
112. Von Braun, J., **M.T. Ruel**, and S. Gillespie. Bridging the gap between the agriculture and health sectors. In: *Reshaping Agriculture for Nutrition and Health*. Fan, S. and R. Pandya-Lorch, eds. Chapter 21. IFPRI 2020 Conference book. International Food Policy Research Institute, Washington, DC, February 2012.
113. Rawat, R., K.K. Saha, A. Kennedy, F. Rohner, **M. Ruel**, P. Menon (2013) Anaemia in infancy in rural Bangladesh: contribution of iron deficiency, infections and poor feeding practices. *British Journal of Nutrition*, June 17, 1-10 [epub ahead of print].
114. Nguyen, P.H., R. Avula, **M.T. Ruel**, K.K. Saha, D. Ali, L.M. Tran, E.A. Frongillo and P. Menon (2013) Maternal and child dietary diversity are associated in Bangladesh, Vietnam, and Ethiopia. *Journal of Nutrition* 143(7):1176-83 ([DOI: 10.3945/jn.112.172247](https://doi.org/10.3945/jn.112.172247)).
115. Nguyen, P.H., K.K.Saha, D. Ali, P. Menon, S. Manohar, L.T. Mai, R. Rawat and **M.T. Ruel**. (2013) Maternal mental health is associated with child undernutrition and illness in Bangladesh, Vietnam and Ethiopia. *Public Health Nutrition*, May 3: 1-10 [epub ahead of print].
116. **M.T. Ruel** and H. Alderman (2013) Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition? *The Lancet* 6736(13): 1-16 (DOI: 10.1016/S0140-6736(13)60843-0).
117. Menon, P., R. Rawat and **M. Ruel**. (2013) Bringing rigor to evaluations of large scale programs to improve infant and young child feeding and nutrition: Evaluating the impact of the Alive and Thrive initiative. *Food and Nutrition Bulletin* 34(3)(supplement): S195-S212.
118. Rawat, R., P.H. Nguyen, D. Ali, K. Saha, S. Alayon, S.S. Kim, **Ruel, M.** and P. Menon. (2013) Learning how programs achieve their impact: Embedding theory-driven process evaluation and other program learning mechanisms in Alive & Thrive. *Food and Nutrition Bulletin* 34 (3) (supplement): S212-S225.
119. Maternal and Child Nutrition Study Group (Black, R.E., H. Alderman, Z. A. Bhutta, S. Gillespie, L. Haddad,

- S. Horton, A. Lartey, V. Mannar, **M. Ruel**, C. G. Victora, S. P. Walker and P. Webb. Maternal and child nutrition: building momentum for impact. *Lancet Journal* 2013. [http://dx.doi.org/10.1016/S0140-6736\(13\)60988-5](http://dx.doi.org/10.1016/S0140-6736(13)60988-5).
120. D. Ali, K. Saha, P.H. Nguyen, M. Diressie, **M. Ruel**, P. Menon, and R. Rawat. (2013) Household food insecurity is associated with higher child undernutrition in Bangladesh, Ethiopia, and Vietnam, but the effect is not mediated by child dietary diversity. *The Journal of Nutrition* 143: 1-7. <http://dx.doi.org/10.3945/jn.113.175182>
 121. Leroy, J.L., **M. Ruel** and JP Habicht. (2013) Critical windows for nutritional interventions against stunting. Letter to the Editor. *American Journal of Clinical Nutrition* 98: 854-855. <http://doi:10.3945/ajcn.113.066647>
 122. Mbuya MNN, Menon P, Habicht J-P, Pelto GH, **Ruel MT**. Maternal knowledge after nutrition behavior change communication is conditional on both health workers' knowledge and knowledge-sharing efficacy in rural Haiti. *Journal of Nutrition* 143:2022-2028, 2013.
 123. **Ruel, M.T.**, J. Harris and K. Cunningham. *Diet quality in developing countries*. Volume 2. Chapter 18. In: Diet Quality: An Evidence-Based Approach. Preedy, Victor R.; Hunter, Lan-Anh; Patel, Vinood B. (eds.). Springer. New York, Heidelberg, Dordrecht, London, 2013, pp 239-261.
 124. Eggersdorfer, M., **M. Ruel**, H.K. Biesalski, J. Chen, V. Mannar, K. Kraemer, M. van Ameringen, M. Bloem, A. Lateef (eds). (2013). The Road to Good Nutrition. A Global Perspective. S. Karger AG, Basel, Switzerland.
 125. **Ruel, M.** Food security and nutrition: linkages and complementarities. (2013) In: Eggersdorfer, M., **M. Ruel**, H.K. Biesalski, J. Chen, V. Mannar, K. Kraemer, M. van Ameringen, M. Bloem, A. Lateef (eds). (2013). The Road to Good Nutrition. A Global Perspective. S. Karger AG, Basel, Switzerland.
 126. Nguyen, P.H., K.K.Saha, D. Ali, P. Menon, S. Manohar, L.T. Mai, R. Rawat and **M.T. Ruel**. (2014) Maternal mental health is associated with child undernutrition and illness in Bangladesh, Vietnam and Ethiopia. *Public Health Nutrition* 17(6): 1318-1327 (doi: 10.1017/S1368980013001043). (B)
 127. Leroy, J. L., Habicht, J.-P., Gonzalez de Cossío, T., & **Ruel, M. T.** (2014). Maternal Education Mitigates the Negative Effects of Higher Income on the Double Burden of Child Stunting and Maternal Overweight in Rural Mexico. *Journal of Nutrition* 144(5): 765-770 (doi:10.3945/jn.113.188474). (A*)
 128. Leroy, J.L., **Ruel, M.**, Frongillo, E.A., Habicht, J.-P. (2014). Linear growth deficit continues to accumulate beyond the first 1000 days in low- and middle-income countries: Global evidence from 51 national surveys. *Journal of Nutrition* 144(9): 1460-1466 (doi: 10.3945/jn.114.191981). (A*)
 129. Leroy, J.L., Ruel, M.T., Habicht, J.P., Frongillo, E.A. (2014). Reply to Victora et al. *Journal of Nutrition* 144(12): 2093 (doi: 10.3945/jn.114.203083). (A*)
 130. Nguyen, P.H., Kim, S.S., Keithly, S.C., Hajeerhoy, N. Tran, L.M., **Ruel, M.T.**, Menon, P. (2014). Incorporating elements of social franchising in government health and services improves the quality of infant and young child feeding counselling services at commune health centres in Vietnam. *Health Policy and Planning* 29(8): 1008-1020 (doi: 10.1093/heapol/czt083). (B)
 131. Nguyen, P.H., Menon, P., Keithly, S.C., Kim, S.S., Hajeerhoy, N., Tran, L.M., **Ruel, M.T.** and R. Rawat. (2014) Program impact pathway analysis of a social franchise model shows potential to improve infant and young child feeding practices in Vietnam. *Journal of Nutrition* 144(10): 1627-1636 (doi: 10.3945/jn.114.194464). (A*)

132. Cunningham, K., **M. Ruel**, E. Ferguson and R. Uauy. (2015). Women's empowerment and child nutritional status in South Asia: a synthesis of the literature. *Maternal and Child Nutrition* (doi: 10.1111/mcn.12125).
133. Leroy, J. L., **Ruel, M.**, Frongillo, E. A., Ballard, T. J., Harris, J. (2015) Measuring the food access dimension of food security: A critical review and mapping of indicators. *Food and Nutrition Bulletin*. DOI: 10.1177/0379572115587274.
134. Leroy, J.L., **Ruel, M.T.**, Habicht, J.P., Frongillo, E.A. (2015) Using height-for-age difference instead of height-for-age z-scores for the meaningful measurement of catch-up growth in children under 5 years of age. In: Sahn, D. (ed) *The Fight Against Hunger and Malnutrition*, p. 19-35.
135. Cunningham, K., Ploubidis, G. B., Menon, P., **Ruel, M.**, Kadiyala, S., Uauy, R., & Ferguson, E. (2015). Women's empowerment in agriculture and child nutritional status in rural Nepal. *Public Health Nutrition*, (25), 1–12. doi:10.1017/S1368980015000683.
136. Olney, D. K., Pedehombga, A., **Ruel, M. T.**, & Dillon, A. (2015). A 2-Year Integrated Agriculture and Nutrition and Health Behavior Change Communication Program Targeted to Women in Burkina Faso Reduces Anemia, Wasting, and Diarrhea in Children 3-12.9 Months of Age at Baseline: A Cluster-Randomized Controlled Trial. *Journal of Nutrition* doi:10.3945/jn.114.203539.1.
137. Carletto, G., **Ruel, M.**, Winters, P., & Zezza, A. (2015). Farm-level pathways to improved nutritional status: introduction to the Special Issue. *The Journal of Development Studies*, 51:8; 945-957. <http://dx.doi.org/10.1080/00220388.2015.1018908>
138. Leroy, J.L., **Ruel, M.**, Habicht, J.-P., Frongillo, E.A. (2015) Using height-for-age (HAD) instead of height-for-age z-scores (HAZ) for the meaningful measurement of population-level catch-up in linear growth in children less than 5 years of age. *BMC Pediatrics* 15:145; DOI 10.1186/s12887-015-0458-9. 10.1186/s12887-015-0458-9
139. Menon, P., Nguyen, P.H., Saha, K.K., Khaled, A., Sanghvi, T., Baker, J., Afsana, K., Haque, R., Frongillo, E.A., **Ruel, M.T.**, Rawat, R. 2016. Combining intensive counseling by frontline workers with a nationwide mass media campaign has large differential impacts on complementary feeding practices but not on child growth: Results of a cluster-randomized program evaluation in Bangladesh. *J Nutr (A*)* DOI: 10.3945/jn.116.232314.
140. Phuong Nguyen, Sunny Kim, Tuan Nguyen, Lan Tran Mai, Nemat Hajeebhoy, **Marie Ruel**, Rahul Rawat, Ed Frongillo, Purnima Menon. 2016. Factors Influencing utilization of Infant and Young Child Feeding (IYCF) Counselling Services in Viet Nam Vietnam. *Plos One (A)*, March 2016, pp. 1-17. DOI:10.1371/journal.pone.0151358
141. Olney, DK, Lilia Bliznashka, Abdoulaye Pedehombga, Andrew Dillon, **Marie T. Ruel**, Jessica Heckert. 2016. A 2-y Integrated Agriculture and Nutrition Program Targeted to Mothers of Young Children in Burkina Faso Reduced Underweight among Mothers and Increased Their Empowerment: A Cluster-Randomized Controlled Trial. *J Nutr (A*)*, April 2016. Doi: 10.3945/jn.114.203539
142. Leroy, J.L., D. Olney and **M. Ruel**. 2016. Tubaramure, a Food-Assisted Integrated Health and Nutrition Program in Burundi, Increases Maternal and Child Hemoglobin Concentrations and Reduces Anemia: A Theory-Based Cluster-Randomized Controlled Intervention Trial. *J Nutr (A*)*, first published online July 13, 2016. Doi: 10.3945/jn.115.227462
143. Phuong Nguyen, Sunny Kim, Tuan Nguyen, Lan Tran Mai, Nemat Hajeebhoy, **Marie Ruel**, Rahul Rawat, Ed Frongillo. 2016. Exposure to mass media and interpersonal counseling has additive effects on exclusive breastfeeding and its psychosocial determinants among Vietnamese mothers. *Maternal and Child Nutrition* DOI: 10.1111/mcn.12330
144. Menon, P., Nguyen, P.H., Sarah, K.K., Khaled, A., Kennedy, A., Tran, L.M., Sanghvi, T., Hajeebhoy, N.Baker, J., Alayon, S., Afsana, K.Haque, R., Frongillo, E.A., **Ruel, M.T.** Rawat, R. 2016. Impacts on

- breastfeeding practices of at-scale strategies that combine intensive interpersonal counseling, mass media, and community mobilization: Results of cluster-randomized program evaluations in Bangladesh and Viet Nam. *PLoS Med* 13(10): e1002159. DOI: 10.1371/journal.pmed.1002159.
145. Sunny S. Kim, Rahul Rawat, Edina M. Mwangi, Roman Tesfaye, Yewelsew Abebe, Jean Baker, Edward A. Frongillo, **Marie T. Ruel**, Purnima Menon. 2016. Exposure to large-scale social and behavior change communication interventions is associated with improvements in infant and young child feeding practices in Ethiopia. *PLoS ONE* 11 (10): e0164800. doi:10.1371/journal.pone.0164800. (A).
 146. Olney, Deanna K. and Dillon, Andrew; Ruel, **Marie T.**; Nielsen, Jennifer. 2016. Lessons learned from the evaluation of Helen Keller International's enhanced homestead food production program. In *Achieving a nutrition revolution for Africa: The road to healthier diets and optimal nutrition*. Covic, Namukolo and Hendriks, Sheryl L. (Eds.). Chapter 6. Pp. 67-81. Washington, D.C.: International Food Policy Research Institute (IFPRI). http://dx.doi.org/10.2499/9780896295933_06
 147. Leroy, Jef L.; Olney, Deanna K.; and **Ruel, Marie T.** 2016. Evaluating nutrition-sensitive programs: challenges, methods, and opportunities. In *Achieving a nutrition revolution for Africa: The road to healthier diets and optimal nutrition*. Covic, Namukolo and Hendriks, Sheryl L. (Eds.). Chapter 10. Pp. 130-146. Washington, D.C.: International Food Policy Research Institute (IFPRI). http://dx.doi.org/10.2499/9780896295933_10
 148. **Ruel, Marie T.** 2017. Measuring infant and young child complementary feeding practices: indicators, current practice, and research gaps. In: Black RE, Makrides M, Ong KK (eds): *Complementary Feeding: Building the Foundations for a Healthy Life*. Nestlé Nutr Inst Workshop Ser, vol 87, pp. 73-87, (DOI: 10.1159/000448939) Nestec Ltd., Vevey/S. Karger AG., Basel.
 149. **Marie T Ruel** and James Garrett. Urbanization, poverty, food security and nutrition. 2017. In: de Pee, S., Taren, D., Bloem, M. (eds). *Nutrition and Health in a Developing World*, 3rd edition. Part VII, pp. 705-735. Springer Science+Business Media, New York, NY.
 150. Deanna K Olney, Jef L Leroy, **Marie Ruel**. Evaluation of nutrition sensitive interventions. 2017. In: de Pee, S., Taren, D., Bloem, M. (eds). *Nutrition and Health in a Developing World*, 3rd edition. Part IV, pp. 603-624. Springer Science+Business Media, New York, NY.
 151. Frongillo EA, Nguyen PH, Saha KK, Sanghvi T, Afsana K, Haque R, Baker J, **Ruel MT**, Rawat R, Menon P. 2017. Large-scale behavior-change initiative for infant and young child feeding advanced language and motor development in a cluster-randomized program evaluation in Bangladesh. *Journal of Nutrition* 147:256-263. doi:10.3945/jn.116.240861 (A*)
 152. Derek Headey, Phuong Nguyen, Sunny Kim, Rahul Rawat, **Marie Ruel** and Purnima Menon. 2017. Is exposure to animal feces harmful to child nutrition and health outcomes? A multi-country observational analysis. *American Journal of Tropical Hygiene and Medicine* 96(4): 961–969. doi: [10.4269/ajtmh.16-0270](https://doi.org/10.4269/ajtmh.16-0270) (B)
 153. Nguyen, P.H., D. Heady, E.A. Frongillo, L.M. Tran, R. Rawat, **M.T. Ruel** and P. Menon. 2017. Changes in underlying determinants explained rapid increases in child linear growth in Alive & Thrive study areas between 2010 and 2014 in Bangladesh and Vietnam. *Journal of Nutrition* 147(3):462-469. doi: 10.3945/jn.116.243949. (A*)
 154. Huybregts, L., E. Becquey, A. Zongrone, A. Le Port, R. Khassanova, L. Coulibaly, J. Leroy, R. Rawat, and **M.T. Ruel**. 2017. "The Impact of Integrated Prevention and Treatment on Child Malnutrition and Health: The PROMIS Project, a Randomized Control Trial in Burkina Faso and Mali." *BMC Public Health* 17 (237): 1–11. doi:10.1186/s12889-017-4146-6. (A)
 155. Rawat R, Nguyen PH, Tran LM, Hajeebhoy N, Van Nguyen H, Baker J, Frongillo EA, **Ruel MT** and Menon P. 2017. Social Franchising and a Nationwide Mass Media Campaign Increased the Prevalence of Adequate

- Complementary Feeding in Vietnam: A Cluster-Randomized Program Evaluation. *J Nutr* [Internet] 2017;jn243907. Available from: <http://jn.nutrition.org/lookup/doi/10.3945/jn.116.243907> (A*)
156. Phuong Hong Nguyen, Sunny S. Kim, Tina Sanghvi, Zeba Mahmud, Lan Mai Tran, Sadia Shabnam, Bachera Aktar, Raisul Haque, Kaosar Afsana, Edward A. Frongillo, **Marie T. Ruel**, Purnima Menon. 2017. Integrating Nutrition Interventions into an Existing Maternal, Neonatal, and Child Health Platform Increased Maternal Dietary Diversity, Micronutrient Intake, and Exclusive Breastfeeding Practices in Bangladesh: Results of a Cluster-Randomized Program Evaluation: *J Nutr* 2017; First published ahead of print October 11, 2017 as doi: 10.3945/jn.117.257303. (A*)
157. Le Port, A., Bernard, T., Hidrobo, M., Birba, O., Rawat, R., **Ruel, M.T.** Delivery of iron-fortified yoghurt, through a dairy value chain program, increases hemoglobin concentration among children 24 to 59 months old in Northern Senegal: a cluster-randomized control trial. *PLoS ONE* 12 (2): e0172198. doi:10.1371/journal.pone.0172198.
158. **Ruel, M.**, J. Garrett, and S. Yosef. Food security and nutrition: Growing cities, new challenges. In: 2017 Global Food Policy Report. Chapter 3. Pp 24-33. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/9780896292529_03.

Non Peer-reviewed Publications, Published Abstracts, Workshop Proceedings, Reports, Mimeo

- Ruel, M. T.** 1992. El uso de datos antropométricos en los procesos de vigilancia alimentaria y nutricional. In *Seminario-Taller Subregional: "Análisis y uso de la información alimentario-nutricional que se genera en los países del Istmo Centroamericano: Elaboración de una Estrategia Subregional para la Acción,"* ed. R. Sibrian and A. Aburto, 39–58, September 1–4. Guatemala: OPS/INCAP/UNICEF/CEE.
- Arévalo, F., M. T. Oyarzun, **M. T. Ruel**, and J. Rivera. 1994. Caracterización de los programas de alimentación complementaria a la población materno-infantil de Guatemala. In *Documentos Técnicos Edición XLV Aniversario*, 31-41 (#PCE/033). Guatemala: Instituto de Nutrición de Centro América y Panamá/Organización Panamericana de la Salud (INCAP/OPS).
- Oyarzún, M. T., and **M. T Ruel**. 1994. Ayuda Alimentaria en Guatemala: *Caracterización de Proyectos de Alimentación Complementaria a la Población Materno Infantil* (#DOE/IP/064). Guatemala: Instituto de Nutrición de Centro América y Panamá/Organización Panamericana de la Salud (INCAP/OPS).
- Ruel, M. T.** 1994. El enfoque de 'beneficio' en la selección de beneficiarios para programas de alimentación complementaria. In *Documentos Técnicos Edición XLV aniversario*, 42–49 (#PCE/034). Guatemala: Instituto de Nutrición de Centro América y Panamá/Organización Panamericana de la Salud (INCAP/OPS).
- Ruel, M. T.** 1994. La importancia de la escolaridad materna en la salud, el crecimiento y la sobrevivencia del niño. In *Documentos Técnicos Edición XLV aniversario.*, 53–57 (#PCE/035). Guatemala: Instituto de Nutrición de Centro América y Panamá/Organización Panamericana de la Salud (INCAP/OPS).
- Ruel, M. T.**, J. Rivera, and R. Martorell. 1994. Resumen de los hallazgos del estudio de suplementación del INCAP y del estudio de seguimiento y su relevancia para los programas de distribución de alimentos (#DOE/IP/065). Guatemala: Instituto de Nutrición de Centro América y Panamá/Organización Panamericana de la Salud (INCAP/OPS).
- Ruel, M. T.**, F. Arévalo, and R. Martorell. 1995. El Uso de la Investigación Operacional para la Evaluación de Aspectos Funcionales de Programas de Alimentación Complementaria. Monografía 4. Serie: *Investigaciones Operacionales en Alimentación, Nutrición y Atención Primaria de Salud.*, ed. Y. Alfaro (#INCAP SE/004). Guatemala: Instituto de Nutrición de Centro América y Panamá/Organización Panamericana de la Salud (INCAP/OPS).
- Ruel, M. T.**, F. Arévalo, and R. Martorell. 1995. *El Uso de la Investigación Operacional para la Evaluación de Aspectos Funcionales de Programas de Alimentación Complementaria.* Nota Técnica No. 2 (SE/NT/002). Guatemala: Estudio de Caso, CARE.
- Pebley, A., N. Goldman, H. L. Delgado, R. Flores, **M. T. Ruel**, and F. Chew. 1997. *Informe de la Encuesta Guatemalteca de Salud Familiar* (#DCE/027). Guatemala: Instituto de Nutrición de Centro América y Panamá/Organización Panamericana de la Salud (INCAP/OPS).
- Ruel, M. T.**, S. S. Morris, and S. Barquera-Cervera. 1997. Trends in stunting: Is age an issue? In *Third report on the world nutrition situation*, 96–102. Geneva: United Nations Administrative Committee on Coordination/Sub-Committee on Nutrition (ACC/SCN).
- Ruel, M. T.** 2000. Urbanización en América Latina: Limitaciones y oportunidades en la alimentación y en el cuidado de niñas y niños. In *Alimentos Complementarios Procesados en América Latina.* Resultados de una Consultoría Técnica de la Organización Panamericana de la Salud (OPS) y Proyecto LINKAGES. Washington, D.C.: Pan American Health Organization (PAHO).

- Arimond, M., and **M. T. Ruel**. 2003. *Generating indicators of appropriate feeding of children 6 through 23 months from the KPC 2000+*. Washington, D.C.: Food and Nutrition Technical Assistance Project, Academy for Educational Development.
- Rivera, J., K. H. Brown, and **M. Ruel**. 2003. Zinc deficiency: Issues for public health, assessment and prevention. In *Modern aspects of nutrition: Present knowledge and future perspectives*, ed. I. Elmadfa, E. Anklam, and J. Konig, 59–61. Basel, Switzerland: Karger.
- Ruel, M. T.**, C. Loechl, P. Menon, and G. Pelto. 2004. *Can young children's nutritional needs be met with a combination of fortified blended foods and local foods?* IFPRI/WFP Brief – Linking Research and Action. Strengthening Food Assistance and Food Policy Research. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.** 2004. Patterns and determinants of fruit and vegetable demand in developing countries: A multi-country comparison. Report of a Joint FAO/WHO Workshop on Fruit and Vegetables for Health, September 1–3, Kobe, Japan. Rome: World Health Organization and Food and Agriculture Organization of the United Nations.
- Ruel, M. T.**, N. Minot, and L. Smith. 2004. Patterns and determinants of fruit and vegetable consumption in Sub-Saharan Africa. Background paper presented at the Joint FAO/WHO Workshop on Fruit and Vegetables for Health, September 1–3, Kobe, Japan. Geneva: World Health Organization, 2005 (electronic resource only, www.who.int/dietphysicalactivity/fruit/en).
- Loechl, C. U., M. Arimond, P. Menon, **M. T. Ruel**, J.-P. Habicht, and G. Pelto. 2005. Feasibility of distributing micronutrient sprinkles along with take-home food aid rations in rural Haiti. Abstract prepared and submitted to Experimental Biology 2006 Meetings, San Francisco.
- P. Menon, **M. T. Ruel**, C. U. Loechl, M. Arimond, J.-P. Habicht, and G. Pelto. 2005. Micronutrient sprinkles are effective at reducing anemia among children 6–24 months in rural Haiti. Abstract prepared and submitted to Experimental Biology 2006 Meetings, San Francisco.
- Ruel, M. T.**, C. Loechl, G. Pelto, and P. Menon. 2005. *Operations research: How it can strengthen food-aid programs*. IFPRI/WFP Brief – Linking Research and Action. Strengthening Food Assistance and Food Policy Research. Washington, D.C.: International Food Policy Research Institute.
- Michaud, L., P. Menon, **M. T. Ruel**, C. U. Loechl, G. Pelto, and M. Arimond. 2006. Improving complementary feeding through behavior change in Haiti. In *Conference proceedings: 33rd annual international conference on global health*, May 30–June 2, 2006. Final Program, p. A34. Washington, D.C.
- Ruel, M. T.**, and A. Arimond. 2006. Measuring progress: Update on indicators of complementary feeding. In *Conference proceedings: 33rd annual international conference on global health*, May 30–June 2, 2006. Washington, D.C.
- Ruel, M. T.** 2007. *Zinc fortification*. IZiNCG Technical Brief No. 4. International Zinc Nutrition Consultative Group. http://www.izincg.org/pdf/izinc_brief4.pdf?PHPSESSID=7d399b31aad6e40c6a6dd4015815e61a
- Arimond, M., **M. Ruel**, P. Menon, C. Loechl, G. Pelto, J.-P. Habicht, and L. Michaud. 2007. Child feeding practices are improved by a behavior change communications strategy using a small peer group approach in rural Haiti. Abstract prepared and submitted to Experimental Biology 2007 Meetings, Washington, D.C.
- Mbuya, M. N. N., P. Menon, J.-P. Habicht, G. Pelto, E. A. Frongillo, and **M. T. Ruel**. 2007. Shared correct knowledge: A measure to assess the influence of community health workers on mothers' knowledge acquisition in a behavior change communication program in rural Haiti. Abstract prepared and submitted to Experimental Biology 2007 Meetings, Washington, D.C.

- Menon, P., **M. T. Ruel**, M. Arimond, C. U. Loechl, J.-P. Habicht, G. Pelto, and L. Michaud. 2007. From food aid programs to household food security: Insights from two approaches to targeting food assisted maternal and child health programs in rural Haiti. Abstract prepared and submitted to Experimental Biology 2007 Meetings, Washington, D.C.
- Menon, P., **M. T. Ruel**, M. N. N. Mbuya, C. U. Loechl, G. Pelto, M. Arimond, J.-P. Habicht, and L. Michaud. 2007. Translating knowledge about child feeding into adoption of practices: Comparison of two approaches to targeting food aid and behavior change communication (BCC) in maternal and child health programs. Abstract prepared and submitted to Experimental Biology 2007 Meetings, Washington, D.C.
- Ruel, M. T.**, P. Menon, C. Loechl, M. Arimond, J.-P. Habicht, G. Pelto, J. Maluccio, and L. Michaud. 2007. Preventive targeting of food aid and behavior change communication to 6-24-month old children is more effective in reducing undernutrition than targeting malnourished children in rural Haiti. Abstract prepared and submitted to Experimental Biology 2007 Meetings, Washington, D.C.
- Leroy J. L., **M. Ruel**, E. Verhofstadt, and D. Olney. 2008. The micronutrient impact of multisectoral programs focusing on nutrition: Examples from conditional cash transfer, microcredit with education, and agricultural programs. Micronutrient Forum 2008. www.micronutrientforum.org/innocenti.
- bVon Braun, J., **Ruel, M.T.** and A. Gulati. 2008. *Accelerating Progress Toward Reducing Child Malnutrition in India. A Concept for Action*. Washington, D.C.: International Food Policy Research Institute. <http://www.ifpri.org/sites/default/files/publications/indiachildmalnutrition.pdf>
- Gillespie, S. and **M. Ruel**. G8, build political will to overcome malnutrition. *Guardian Professional*, Tuesday 18 June 2013 11.42 EDT

IFPRI Discussion Papers

- Datt, G., E. Payongayong, J. Garrett, and **M. Ruel**. 1997. *The GAPVU transfer program in Mozambique: An assessment*. Food Consumption and Nutrition Division Discussion Paper 36. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.**, and H. Bouis. 1997. *Plant breeding: A long-term strategy for the control of zinc deficiency in vulnerable populations*. Food Consumption and Nutrition Division Discussion Paper 30. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.**, J. L. Garrett, S. S. Morris, D. Maxwell, A. Oshaug, P. Engle, P. Menon, A. Slack, and L. Haddad. 1998. *Urban challenges to food and nutrition security: A review of the literature*. Food Consumption and Nutrition Division Discussion Paper 51. Washington, D.C.: International Food Policy Research Institute.
- Morris, S. S., C. Levin, M. Armar-Klemesu, D. Maxwell, and **M. T. Ruel**. 1999. *Does geographic targeting of nutrition interventions make sense in cities? Evidence from Abidjan and Accra*. Food Consumption and Nutrition Division Discussion Paper 61. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.**, C. E. Levin, M. Armar-Klemesu, D. Maxwell, and S. S. Morris. 1999. *Good care practices can mitigate the negative effects of poverty and low maternal schooling on children's nutritional status: evidence from Accra*. Food Consumption and Nutrition Division Discussion Paper 62. Washington, D.C.: International Food Policy Research Institute.

- Haddad, L., **M. T. Ruel**, and J. L. Garrett. 1999. *Are urban poverty and undernutrition growing? Some newly assembled evidence*. Food Consumption and Nutrition Division Discussion Paper 63. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.**, L. Haddad, and J. L. Garrett. 1999. *Some urban facts of life: Implications for research and policy*. Food Consumption and Nutrition Division Discussion Paper 64. Washington, D.C.: International Food Policy Research Institute.
- Garrett, J. L., and **M. T. Ruel**. 1999. *Are determinants of rural and urban food security and nutritional status different? Some insights from Mozambique*. Food Consumption and Nutrition Division Discussion Paper 65. Washington, D.C.: International Food Policy Research Institute.
- Levin, C. E., D. G. Maxwell, M. Armar-Klemesu, **M. T. Ruel**, S. S. Morris, and C. Ahiadeke. 1999. *Working women in an urban setting: Traders, vendors, and food security in Accra*. Food Consumption and Nutrition Division Discussion Paper 66. Washington, D.C.: International Food Policy Research Institute.
- Armar-Klemesu, M., **M. T. Ruel**, D. Maxwell, C. E. Levin, and S. S. Morris. 2000. *The constraints to good child care practices in an urban environment: Findings from Accra, Ghana*. Food Consumption and Nutrition Division Discussion Paper 81. Washington, D.C.: International Food Policy Research Institute.
- Ruel, **M. T.**, and C. E. Levin. 2000. *Assessing the potential for food-based strategies to reduce vitamin A and iron deficiencies: A review of recent evidence*. Food Consumption and Nutrition Division Discussion Paper 92. Washington, D.C.: International Food Policy Research Institute.
- Menon, P., **M. T. Ruel**, and S. S. Morris. 2000. *Socio-economic differentials in child stunting are consistently larger in urban than rural areas: Analysis of 10 DHS data sets*. Food consumption and Nutrition Division Discussion Paper 97. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.**, M. Armar-Klemesu, and M. Arimond. 2001. *A multiple-method approach to studying childcare in an urban environment: The case of Accra, Ghana*. Food Consumption and Nutrition Division Discussion Paper 116. Washington, D.C.: International Food Policy Research Institute.
- Arimond, M., and **M. T. Ruel**. 2001. *Assessing care: Progress toward the measurement of selected childcare and feeding practices, and implications for programs*. Food Consumption and Nutrition Division Discussion Paper 119. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.**, and P. Menon. 2002. *Quantifying the association between child feeding practices and nutritional status in Latin America: Innovative uses of the Demographic and Health Surveys*. Food Consumption and Nutrition Division Discussion Paper 130. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.**, B. de la Brière, K. Hallman, A. Quisumbing, and N. Coj. 2002. *Does subsidized childcare help poor working women in urban areas? Evaluation of a government-sponsored program in Guatemala City*. Food Consumption and Nutrition Division Discussion Paper 131. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.** 2002. *Dietary diversity: An indicator of food security or dietary quality? A review of experience and measurement issues*. Food Consumption and Nutrition Division Discussion Paper 140. Washington, D.C.: International Food Policy Research Institute.
- Arimond, M., and **M. T. Ruel**. 2002. *Progress in developing an infant and child feeding index: An example using the Ethiopia Demographic and Health Survey 2000*. Food Consumption and Nutrition Division Discussion Paper 143. Washington, D.C.: International Food Policy Research Institute.
- Ruel, M. T.**, K. H. Brown, and L. E. Caulfield. 2003. *Moving forward with complementary feeding: Indicators and*

research priorities. Food Consumption and Nutrition Division Discussion Paper 146. Washington, D.C.: International Food Policy Research Institute.

Garrett, J., and **M. T. Ruel**. 2003. *Stunted child-overweight mother pairs: An emerging policy concern?* Food Consumption and Nutrition Division Discussion Paper 148. Washington, D.C.: International Food Policy Research Institute.

Hallman, K., A. Quisumbing, **M. T. Ruel**, and B. de la Brière. 2003. *Childcare, mothers' work, and earnings: Findings from the urban slums of Guatemala City*. Food Consumption and Nutrition Division Discussion Paper 151. Washington, D.C.: International Food Policy Research Institute.

Quisumbing, A., K. Hallman, and **M. T. Ruel**. 2003. *Maquiladoras and market mamas: Women's work and childcare in Guatemala City and Accra*. Food Consumption and Nutrition Division Discussion Paper 153. Washington, D.C.: International Food Policy Research Institute.

Menon, P., **M. T. Ruel**, C. Loechl, and G. Pelto. 2003. *From research to program design: The use of formative research to develop a behavior change communication program to prevent malnutrition in Haiti*. Food Consumption and Nutrition Division Paper 170. Washington, D.C.: International Food Policy Research Institute.

Smith, L., **M. T. Ruel**, and A. Ndiaye. 2004. *Why is child malnutrition lower in urban than rural areas? Evidence from 36 developing countries*. Food Consumption and Nutrition Division Discussion Paper 176. Washington, D.C.: International Food Policy Research Institute.

Loechl, C., **M. T. Ruel**, G. Pelto, and P. Menon. 2005. *The use of operations research as a tool for monitoring and managing food-assisted maternal/child health and nutrition (MCHN) programs: An example from Haiti*. Food Consumption and Nutrition Division Discussion Paper 187. Washington, D.C.: International Food Policy Research Institute.

Iannotti, L., Cunningham, K., and Ruel, M. 2009. *Improving diet quality and micronutrient nutrition: Homestead food production in Bangladesh*. IFPRI Discussion Paper 928. Washington, D.C.: International Food Policy Research Institute. <http://www.ifpri.org/publication/improving-diet-quality-and-micronutrient-nutrition>
<http://www.ifpri.org/sites/default/files/publications/ifpridp00928.pdf>

Ruel, M.T., Ballard, T.J., Deitchler, M. (2014). Measuring and tracking the access dimension of food security: available indicators and recommendations for future investments. Technical Note 6. Global Nutrition Report.

Ruel, M.T., Quisumbing, A.R, Balagamwala, M. Nutrition-sensitive agriculture: what have we learned and what are the remaining research gaps? IFPRI Discussion Paper 01681. 2017. International Food Policy Research Institute, Washington, DC.