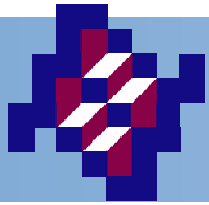


The use of conditional cash transfers and supplements in the reduction of undernutrition through the Progresa/Oportunidades program in Mexico

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Nutrition and Health Research Center,
National Institute of Public Health,
México



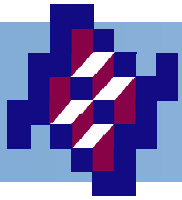
Apologies

I was diagnosed by my *Otorhinolaringologist* with acute rhinosinusitis and bilateral tubareal dysfunction.

I was therefore advised not to fly to New York City, despite my pledge that I would be surrounded by literally hundreds of medical doctors !

I would like to apologize for not being with you today





Food and Nutrition Programs in Mexico

- Mexico has a long tradition of high expenditures in food and nutrition programs (FNP) which have included:

- ✓ Subsidies to the production and consumption of food

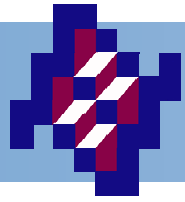
- ✓ Food distribution programs to low income households

- ✓ School breakfast programs

- ✓ Fortification of staple foods

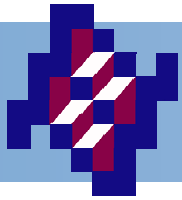
- ✓ Distribution of micronutrient supplements

- ✓ Fortification of foods targeted to vulnerable populations

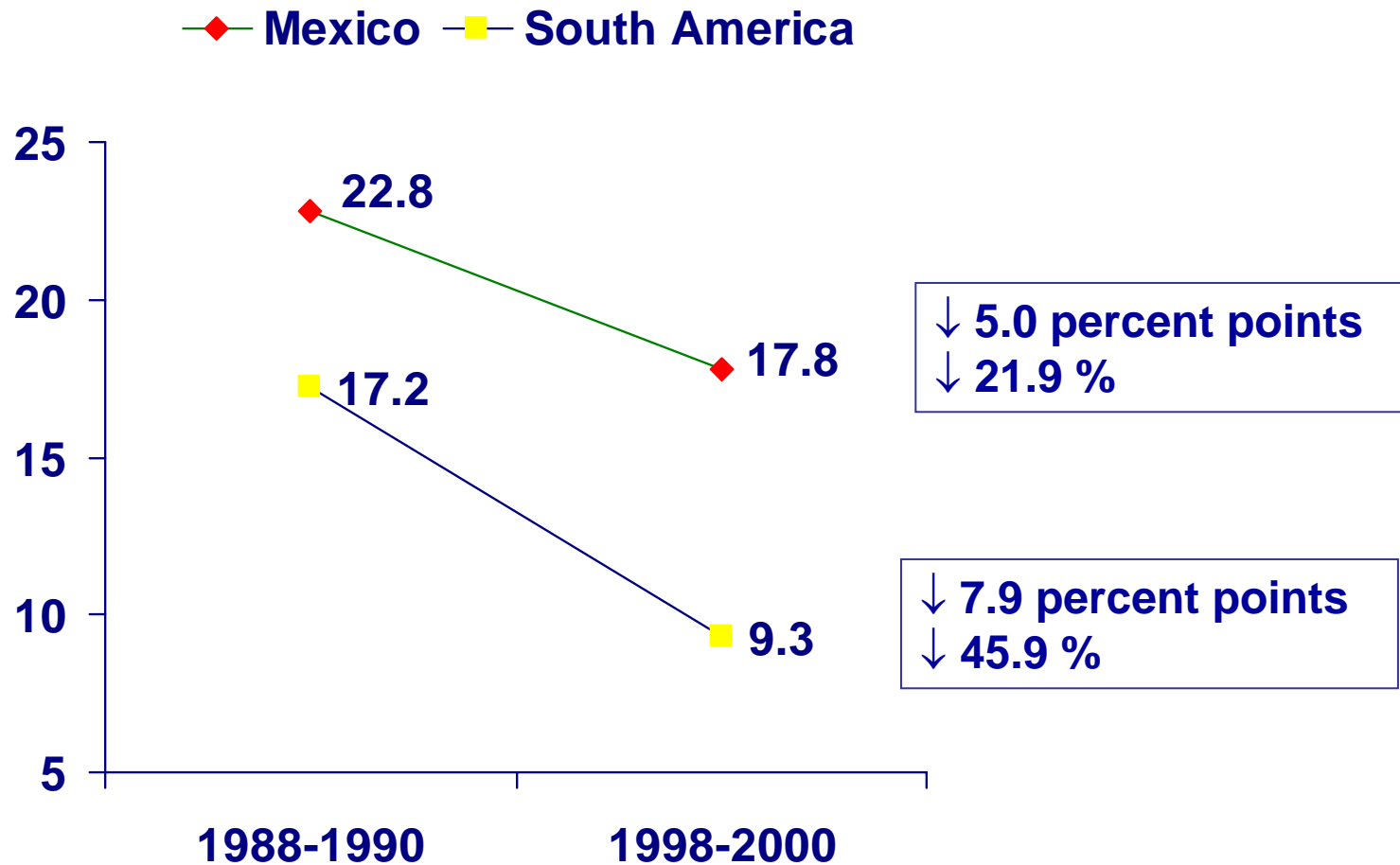


Food and Nutrition Programs in Mexico

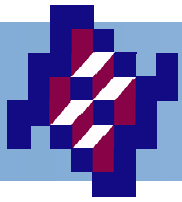
- **In 1993 México spent US \$738 million in food and nutrition programs (FNP)**
- **Or ~ \$275 per undernourished child per year**
- **Above World Bank recommendations at the time: ~\$250/beneficiary/year**
- **Despite these high investment levels the prevalence of stunting was high and its reduction between 1988 and 1999 was disappointing**
- **We analyzed at that time the reasons for the low effectiveness of the high investments in FNP**



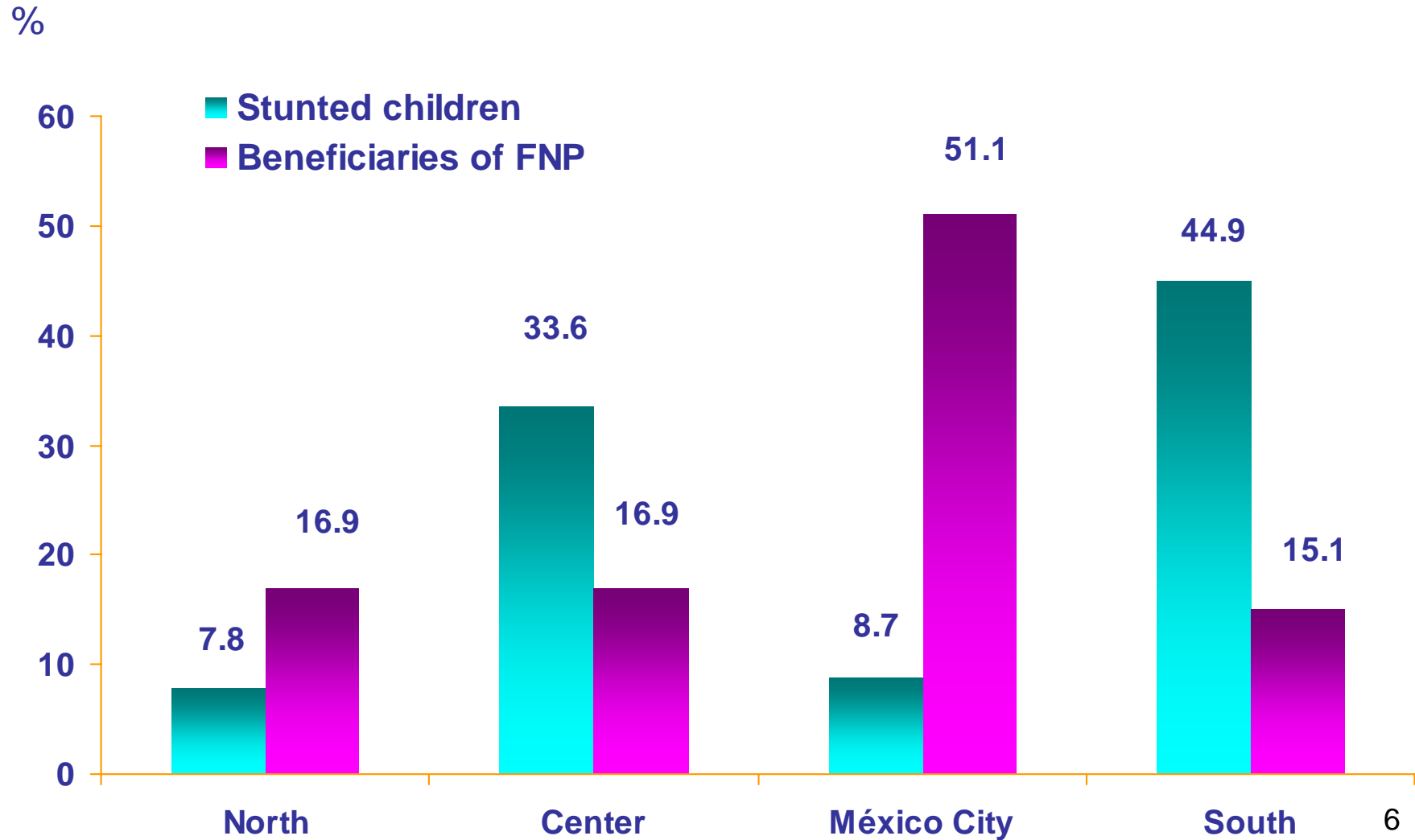
Decline in the prevalence of stunting in Mexico and South America between 1988 and 2000

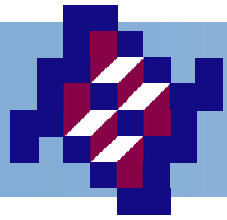


What were the reasons for these poor performance despite high investments?



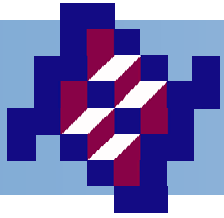
Distribution of stunted children < 5 years of age and beneficiaries of FNP in Mexico by region in 1988





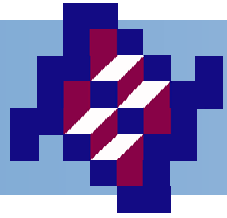
Reasons for low effectiveness

- Inadequate targeting
 - ✓ Emphasis in urban areas
 - ✓ Lack of targeting to children under 2-3 years
- Foods distributed
 - ✓ Not appropriate for young children (not complementary foods)
 - ✓ No rich sources of Micronutrients
- Education component weak
- Duplication of actions and programs
 - ✓ Lack of coordination
 - ✓ Programs did not integrate food, health and education



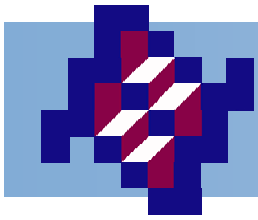
Key changes in FNP in 1997-98 in Mexico

- In 1997 a new Federal Program *Progresa* (now called *Oportunidades*) was created
- Conditional cash transfers are used as incentives for investments in nutrition, health and education of children
 - ✓ Women (not men) receive transfers
 - ✓ Conditional on compliance with health and school services



Key changes in FNP in 1997-98 in Mexico

- Targeted to
 - ✓ Low income households
 - ✓ Rural areas (during first phases)
 - ✓ Children < 2 years, undernourished children 2-4 y and pregnant and lactating women
- A Nutrition Component included
 - ✓ Fortified foods for children and women
 - ✓ Nutrition education
- Evaluation component was included from the design



Energy and nutrient content of complementary food for children (Nutrisano)

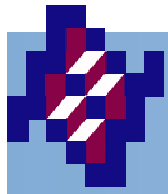
Nutrient	% RDI*
Energy	15%
Protein	36%
Iron	100%
Zinc	100%
Vitamin A	100%
Vitamin E	100%
Vitamin C	100%
Folic Acid	100%
Vitamin B ₁₂	100%

Ingredients:

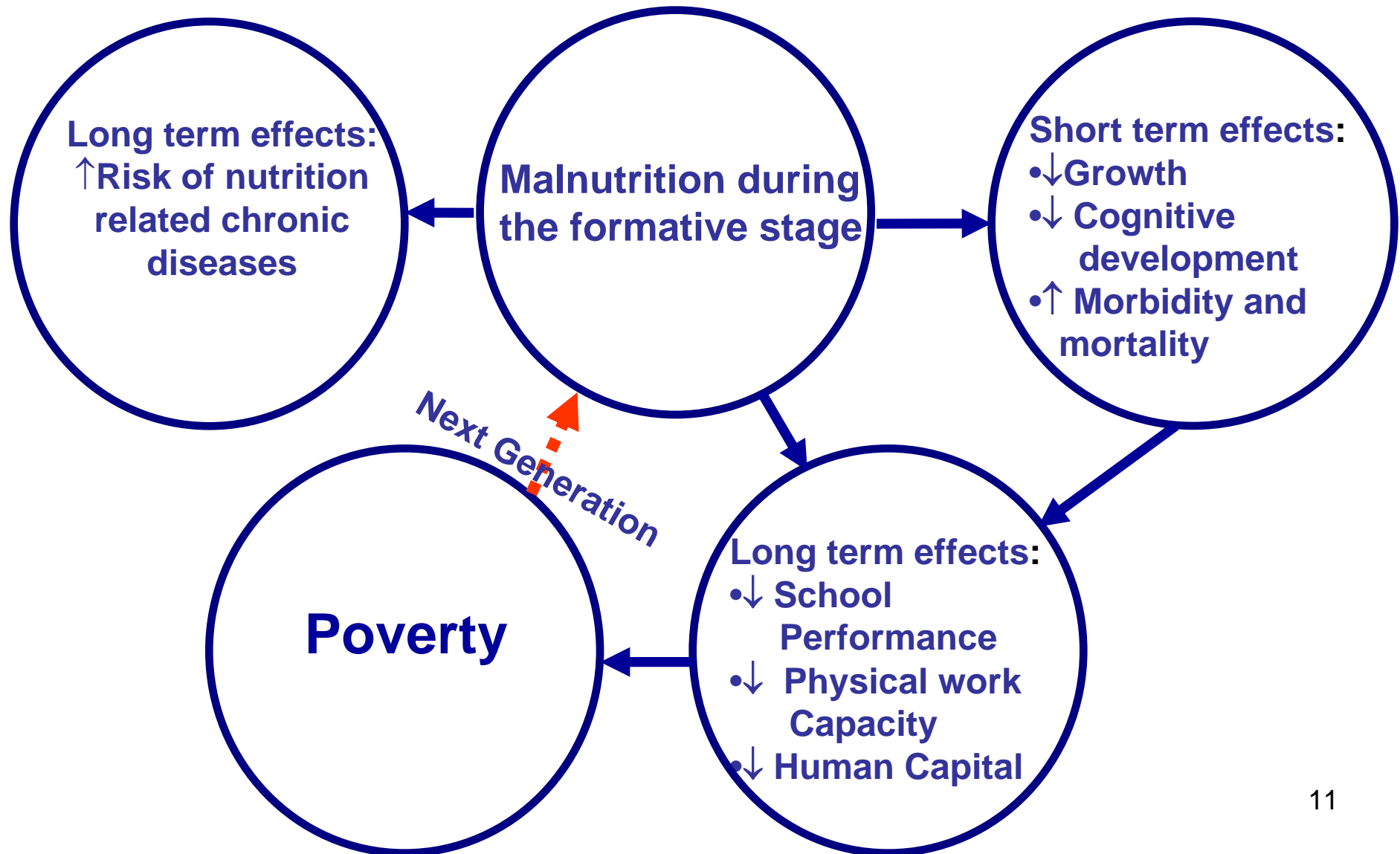
Powdered whole milk, sugar, maltodextrins, vitamins, minerals and flavor

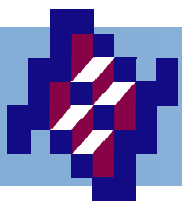
A puree consistency when hydrated

*RDI for 1-3 year old children

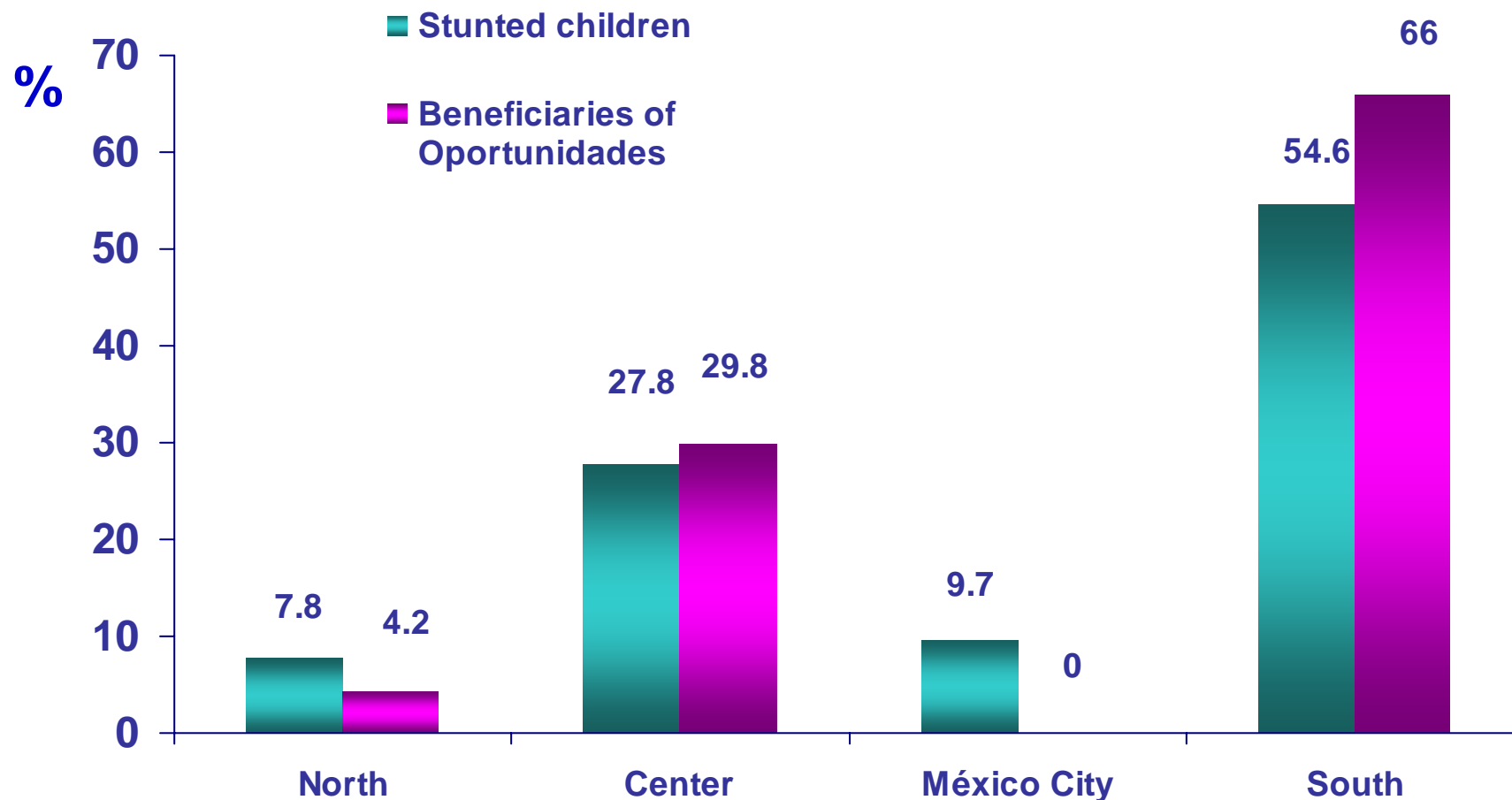


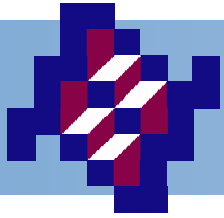
Malnutrition, transgenerational transmission of poverty and health





Distribution of stunted children < 5 years old and beneficiaries of Oportunidades by region in 1999

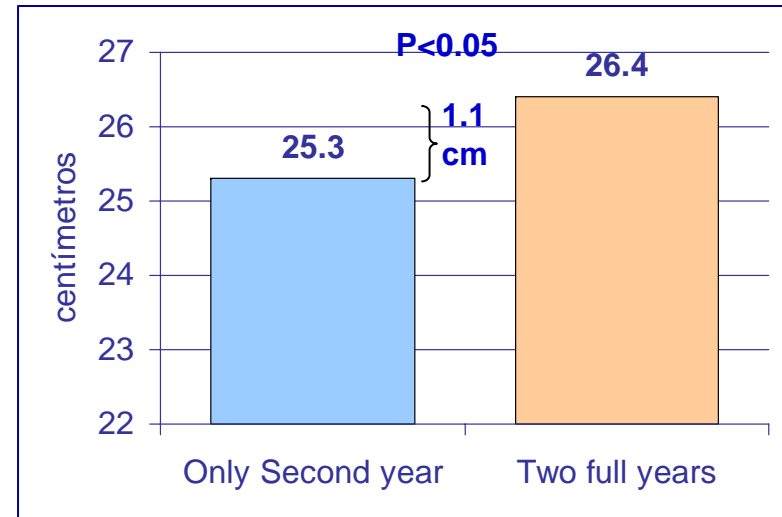




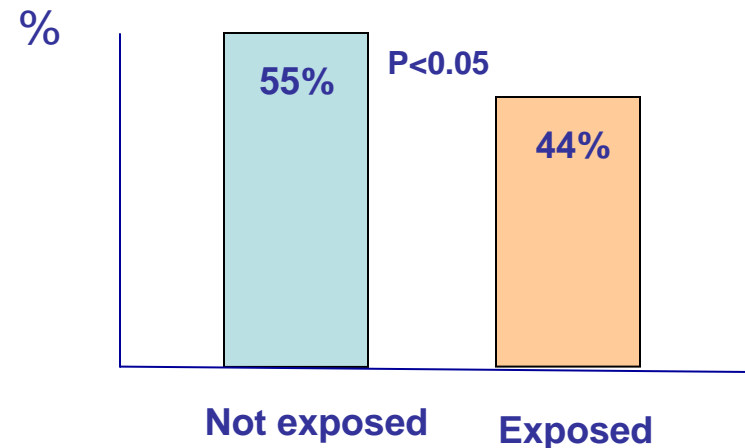
Effectiveness of Progres-Oportunidades

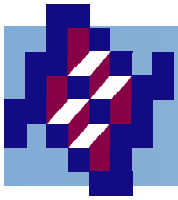
- Positive effects on:
 - Growth
 - Younger age (0-6 mo)
 - Lower Socioeconomic Status

Effects on height after two years of program exposure in lower SES 6 mo old children

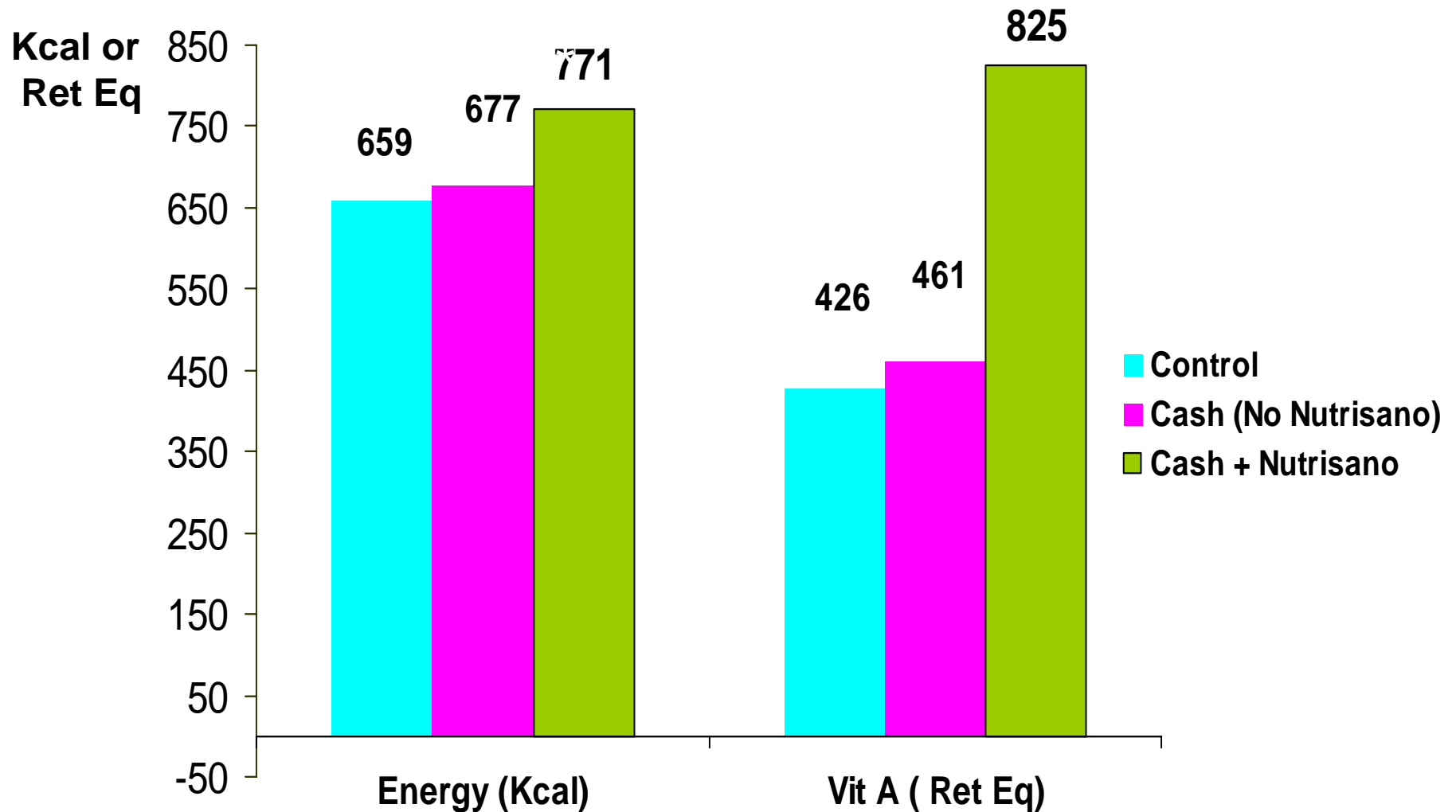


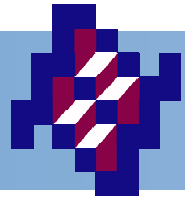
Effects on anemia after one year of exposure



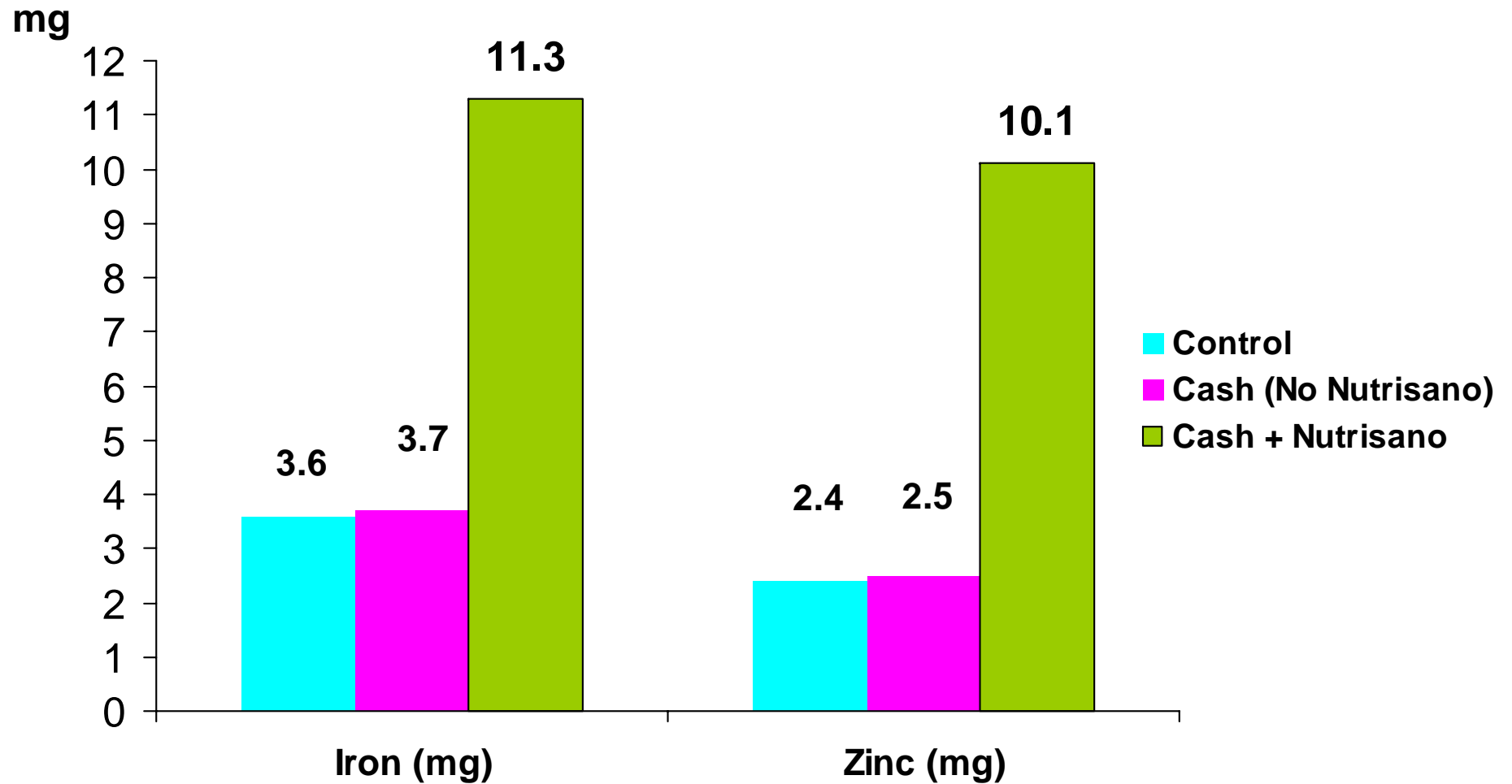


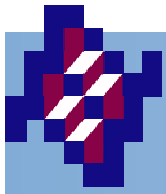
Specific effects of the food supplement (Nutrisano) on the energy and Vitamin A intake of children 12-23 months of age



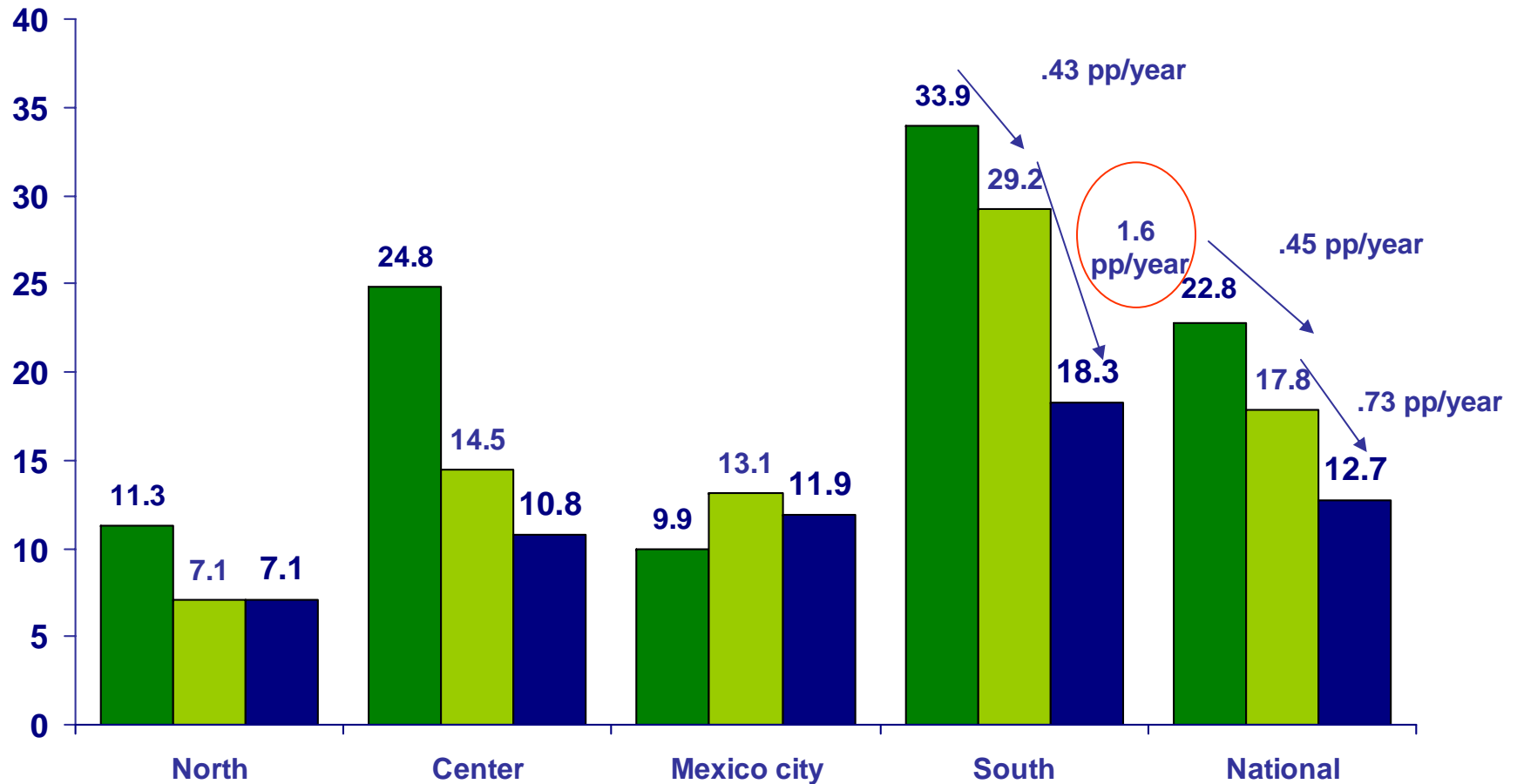


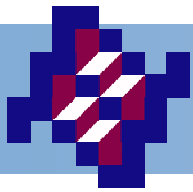
Specific effects of the food supplement (Nutrisano) on the iron and zinc intake of children 12-23 months of age



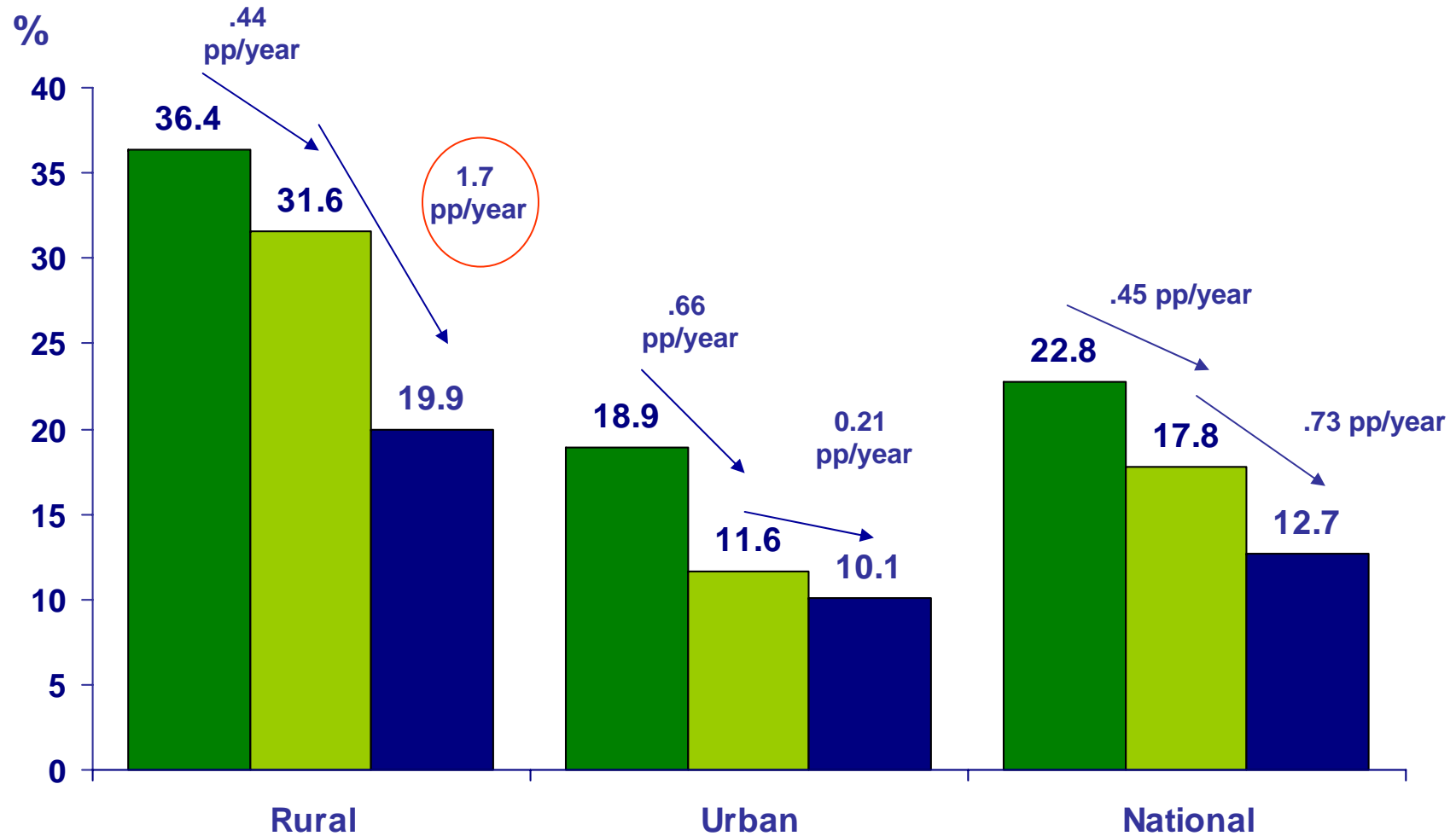


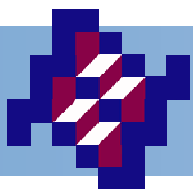
Prevalence of stunting in children < 5 y per region in 1988, 1999 and 2006



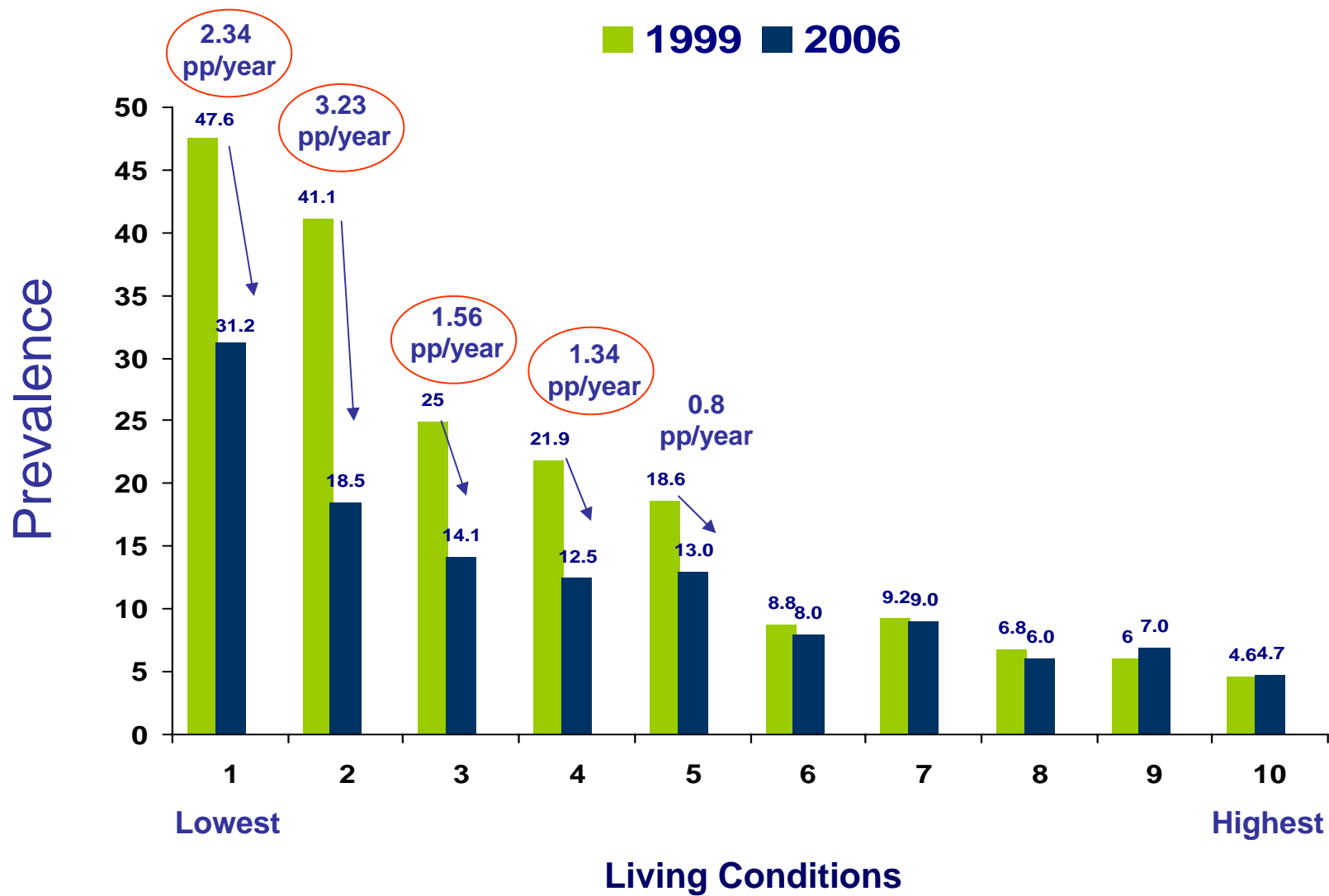


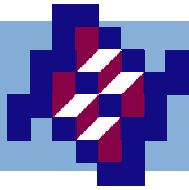
Prevalence of stunting in children < 5 years by urban and rural areas in 1988, 1999 and 2006



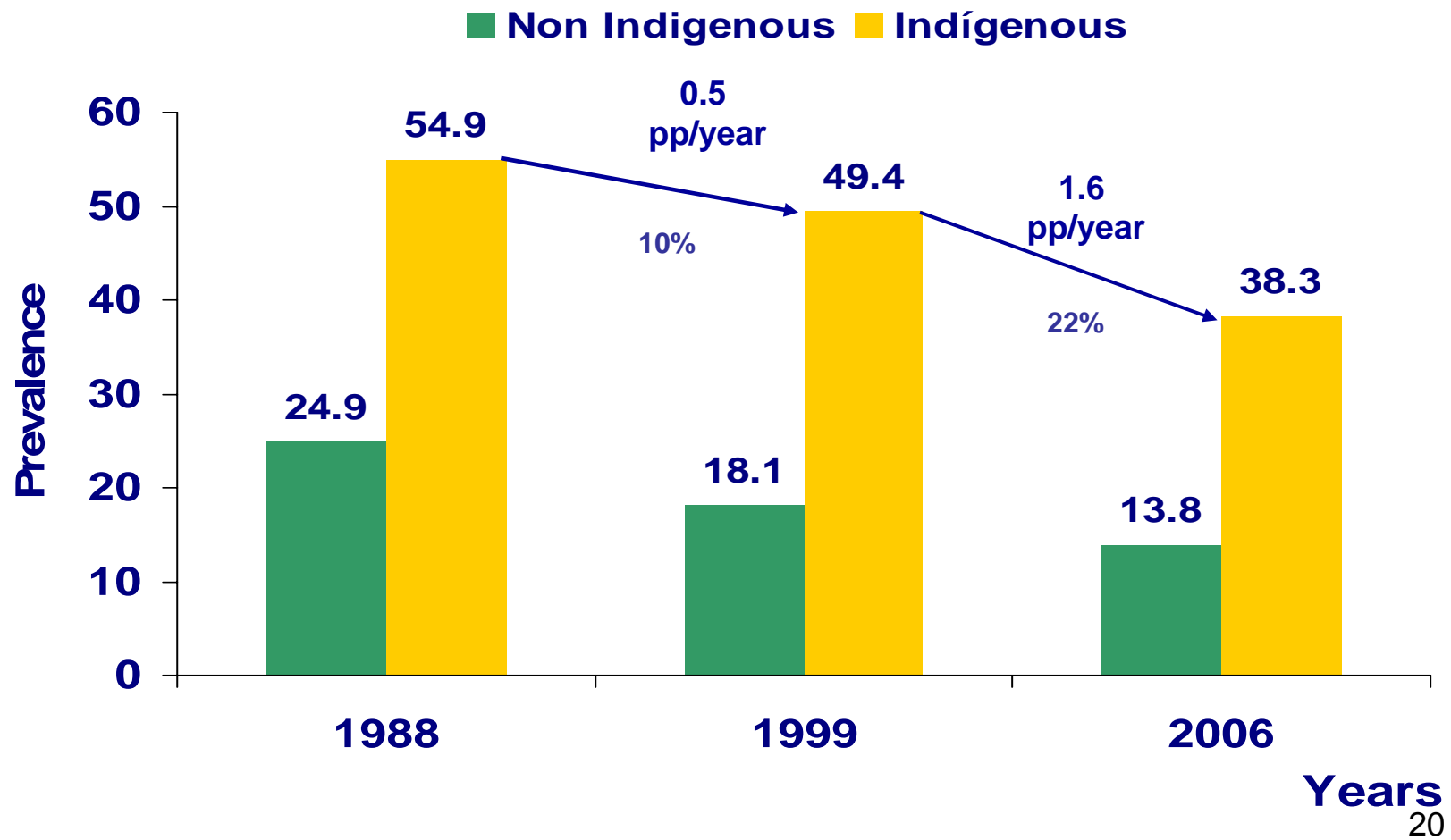


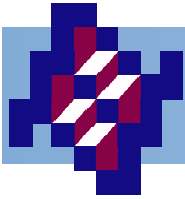
Prevalence of stunting by deciles of living conditions in 1999 and 2006





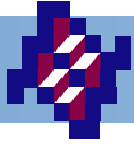
Prevalence of stunting in Indigenous children < 5 years in 1988, 1999 y 2006





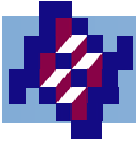
Conclusions

- Impacts of Oportunidades on growth and on the reduction of rates of anemia have been documented
- The impacts are likely due to improved targeting and to the development of a fortified weaning food which was well accepted and consumed by children 6-24 months
- Cash did not seem to have an impact on the diet of children, although it could have influenced growth and anemia through investment in sanitation and improvement in living conditions



Conclusions

- However, despite this success, Mexico still faces high prevalences of stunting and anemia in the south, the rural areas and among the poor
- The evaluation of the program has resulted in recommendations for program improvement. Some of them have already been implemented and others are in the process of implementation
- The use of evaluation results for improving the design and operation of programs is the best way to learn from experience



Thank you