Southampton NHS
University Hospitals NHS Trust

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Considerations for the Health System for Addressing the Double Burden of Malnutrition

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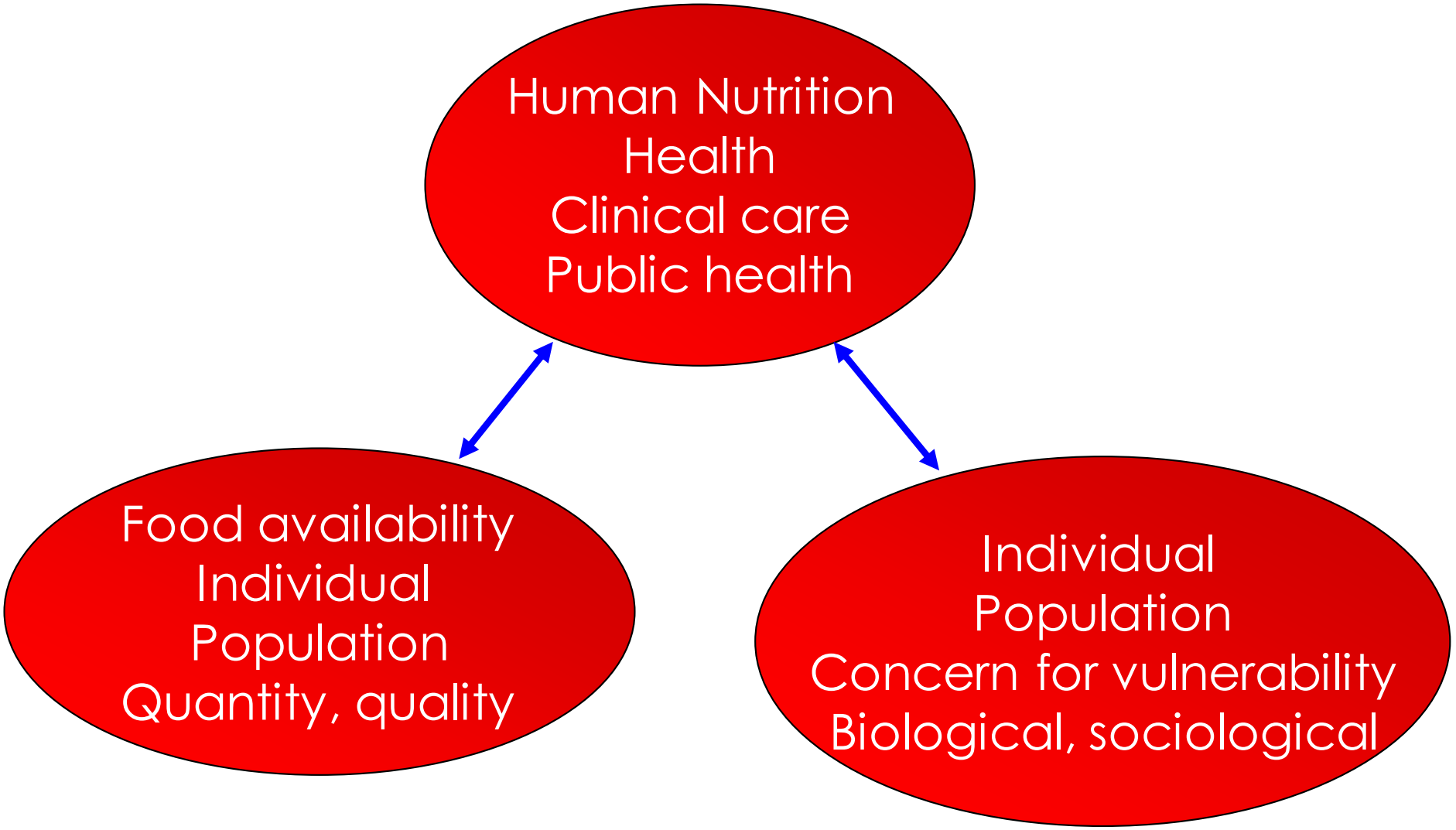
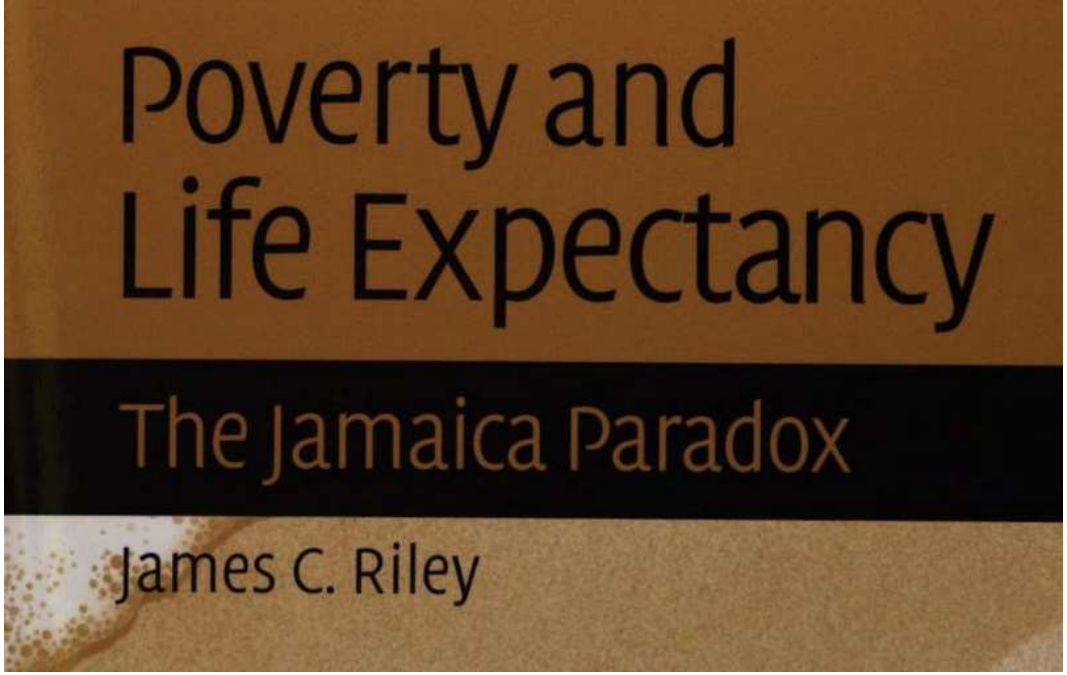
International Symposium
Understanding the Double Burden of Malnutrition for Effective Interventions
Vienna, Austria. 10 – 13 December 2018

Health is a Social Challenge NOT a Medical Problem





Individual vs Community

mutual support for better practice

Healthy opportunity for growth vs unhealthy options

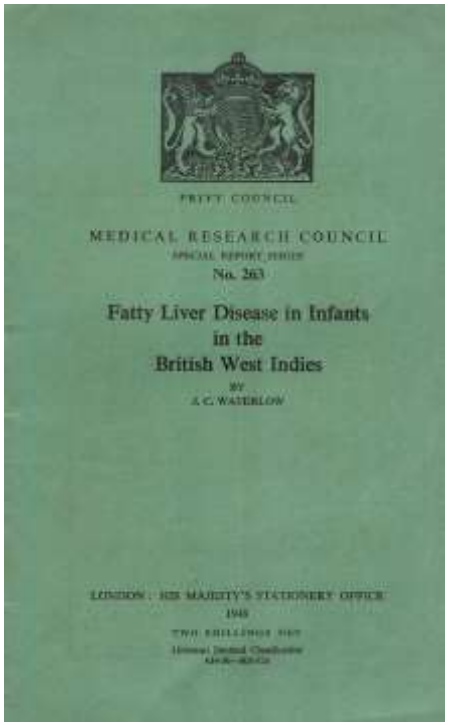
insist on best environment for children

empower and enable women

Leadership

government and their health advisors

John Waterlow
TMRU, Jamaica
Application of isotopic methodologies, 1960

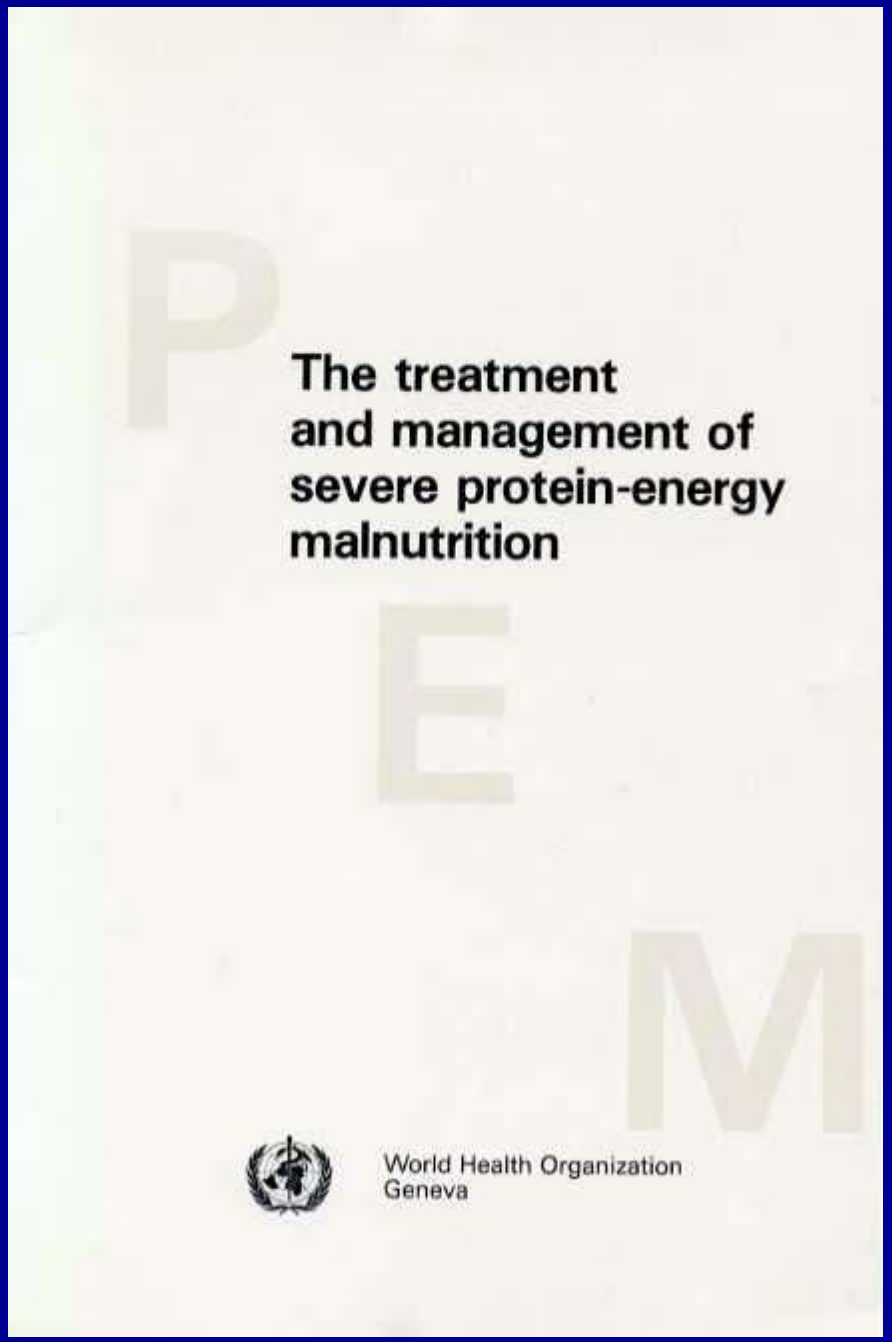


Non-alcoholic fatty liver disease

WHO Treatment Manual

Severe Malnutrition

1981



Schofield & Ashworth, 1993

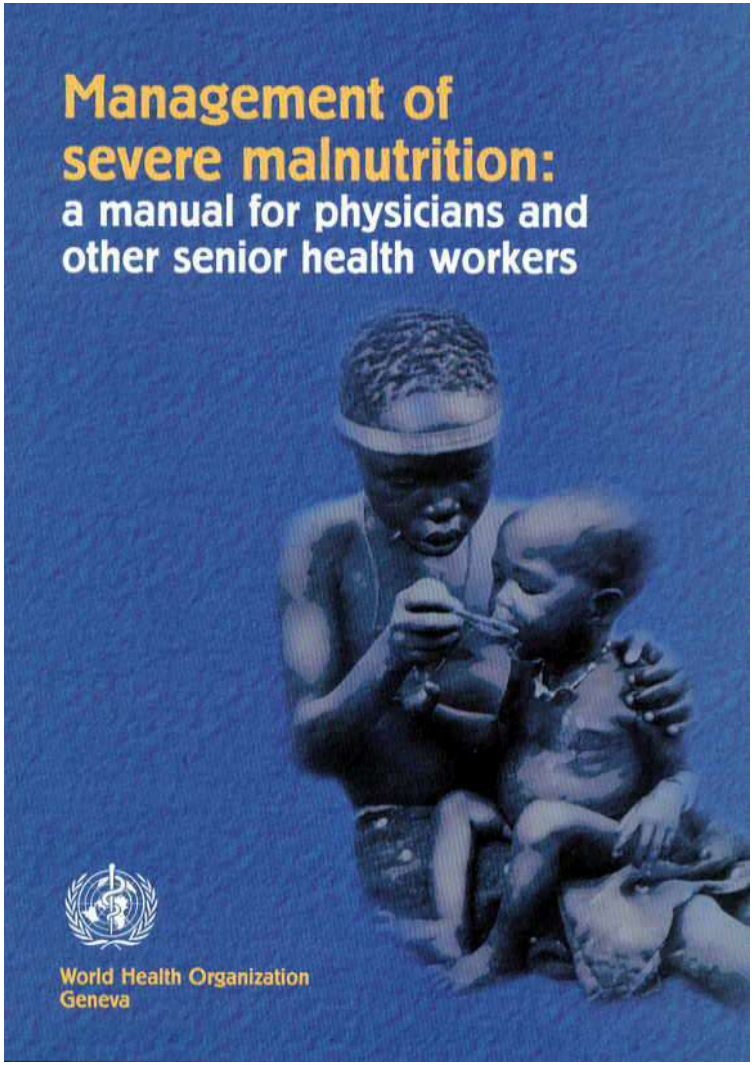
Management of Severe Malnutrition

Case Mortality over 20%

Good case management less than 5 - 10%

		Case Fatality %
1950's	20	9 - 50
1960's	26	11 - 53
1970's	25	16 - 37
1980's	14	3 - 53
1990's	22	4 -34

Revised WHO Guidelines, 1999
Doing Simple Things Well



Nutritional Lens

Effective care counterintuitive

Good basic science
to characterise metabolic phenotype,
to enable translation
to effective clinical care

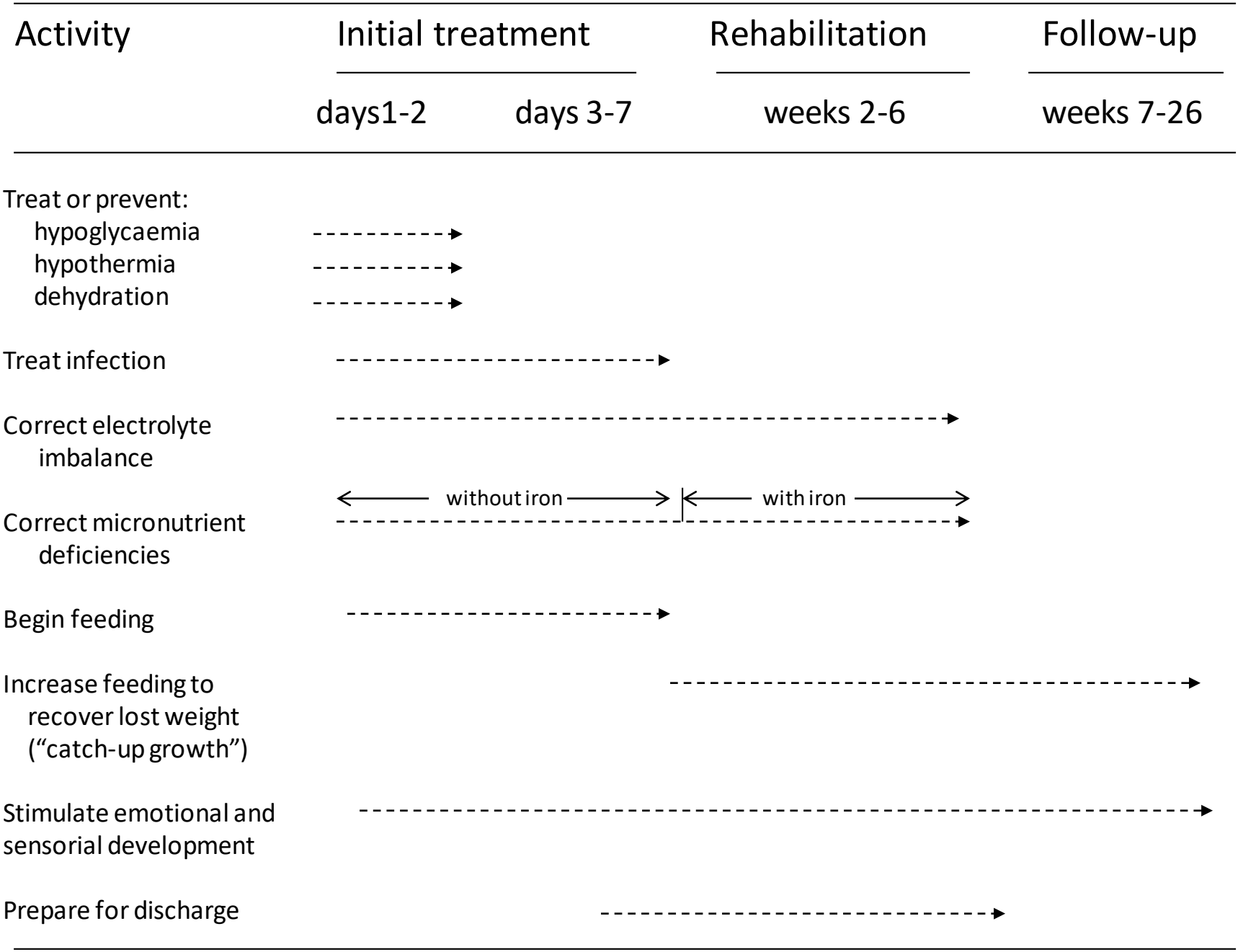
Reductive adaptation:
protein turnover

Specific nutrient deficiencies
K+ , Zn.

Silent infection, stressors

Ten point structured care

WHO: ten steps to treating severe malnutrition



Successes: % dying before and after implementation of WHO guidelines

	Before	After
Brazil (IMIP)	31%	11%
Ecuador	70%	8%
India	17%	3%
Myanmar	18%	9%
Bangladesh (ICDDR)	19%	3%

Source: Ashworth-Hill & Khanum (2002)

Community Based Care: Severe Acute Malnutrition

Active case finding
Assessment for
severe acute malnutrition

degree of wasting

Treat:

Ready to Use Therapeutic Food
RUTF

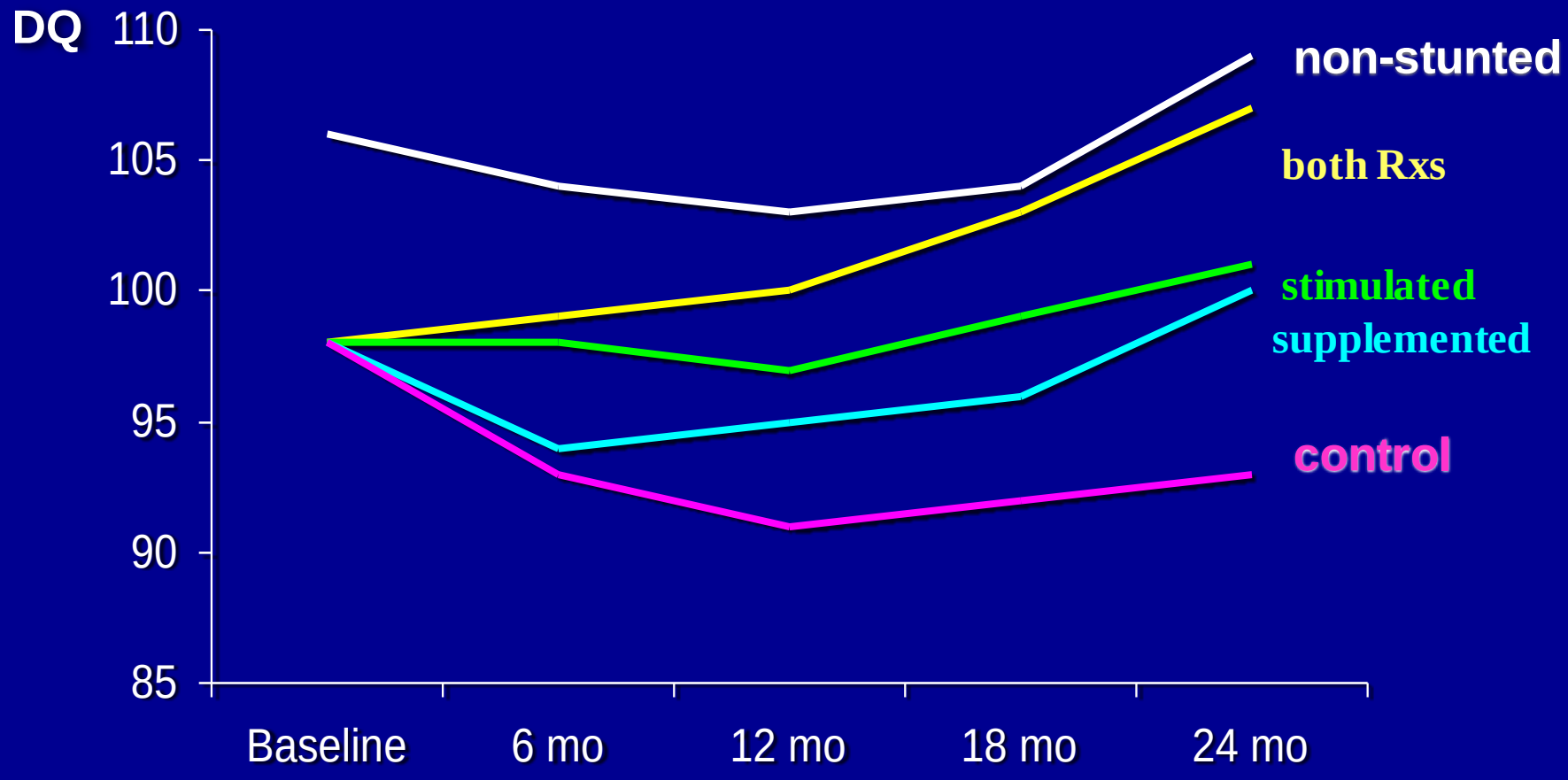
DEVELOPMENT CONTEXT?

IUNS Malnutrition Task Force: Tanzania 2006

Integrated Management of Malnutrition
Nutritional status (anthropometry)

Normal	Food security
Mild to moderate malnutrition, stunting	Supplementary feeding
Severe Acute Malnutrition	Therapeutic food
Severe Acute Malnutrition - oedema - appetite loss	Facility based care

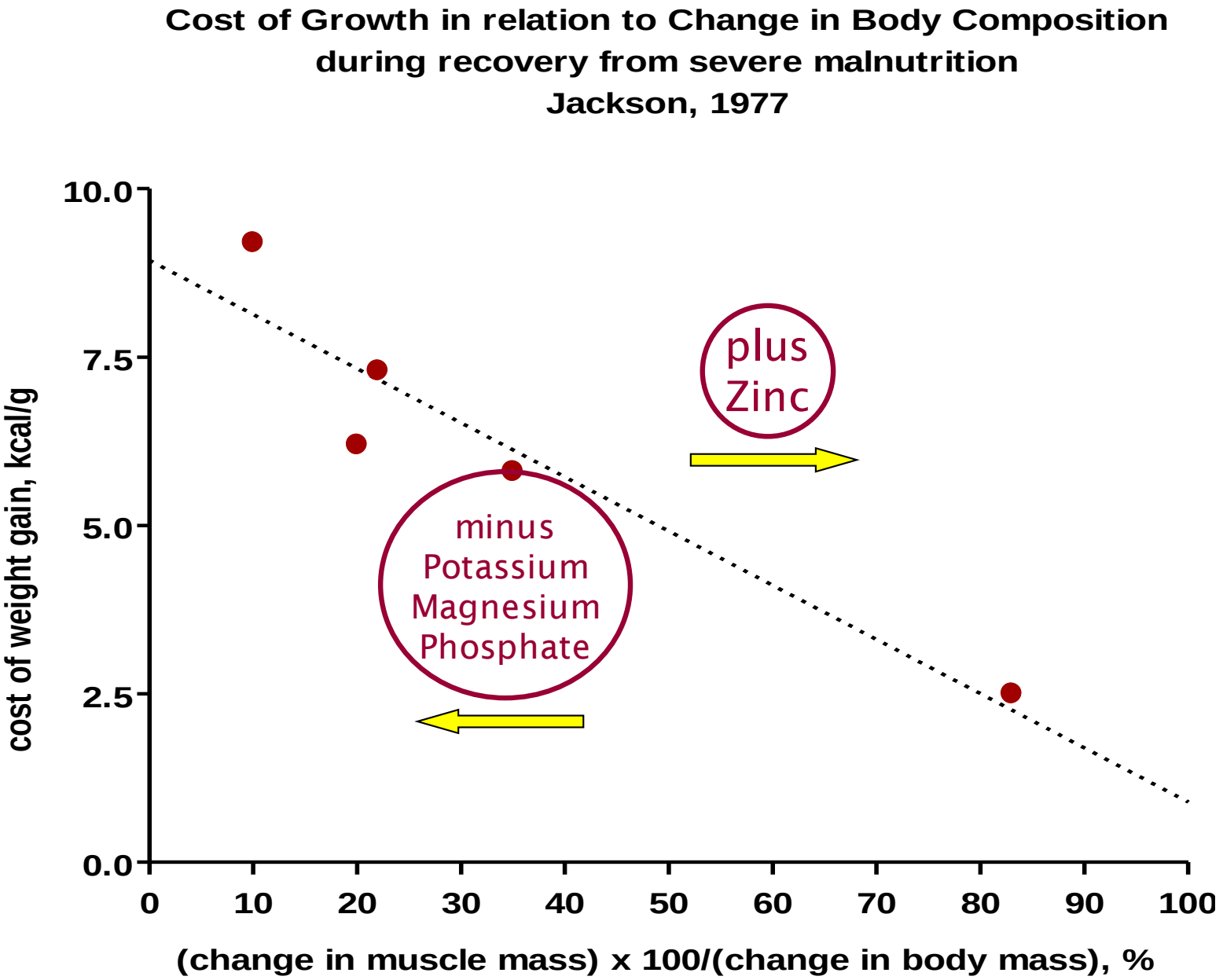
Remedial supplementation + stimulation: RCT with Jamaican stunted children



Grantham-McGregor et al, 1991

Jamaica Home Visiting Intervention Study

Quantity versus Quality: recovery of lost weight



School of thought

- dynamic tension, equipoise
- adaptation, resilience
- multilevel systems problem solving

Aspire after excellence

- intellectual enquiry, creative reflection
- address real problems of practical significance
- adopt/adapt state of the art technologies

Trust

- people, share, mentor, high expectations
- honesty, openness, transparency
- organised application – efficiency
- research delivery pipeline
  - discovery, efficacy, effectiveness, going to scale

Malnutrition eLearning: International Malnutrition Task Force Pre-service training and in-service training

Increased knowledge.

Changed attitudes.

Changed behaviour

Changed organisation and delivery of practice

Improved identification and treatment

Saved lives.

Model: Community Based Approach

Create an Environment/People Centred Health Systems

Cannot do it TO people – pharma model

Have to do it for themselves: help, encourage, enable

Age-friendly communities that foster support for younger and older age groups

Community based care: fit for purpose, context specific

Develop skilled capability

Role of Stressors