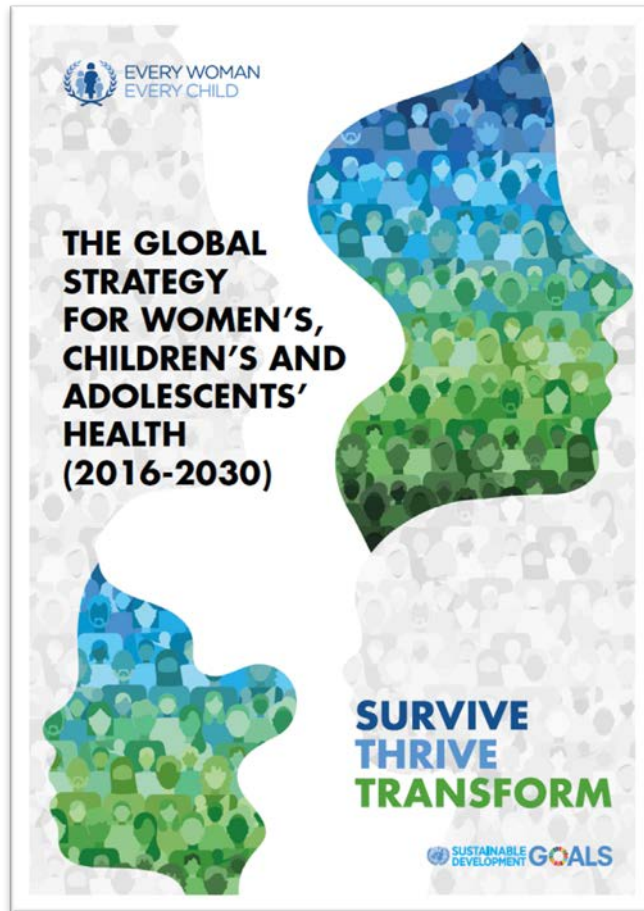


Effective actions for improving adolescent nutrition

30 October 2017

Global strategy for women's, children's and adolescents' health



“The updated Global Strategy includes adolescents because they are central to everything we want to achieve, and to the overall success of the 2030 Agenda.”

- United Nations Secretary General Ban Ki-moon

Use of research evidence

Use of evidence in WHO recommendations

Andrew D O'Connell, John N Lewis, Nils Fethheim

Summary

Background WHO regulations, dating back to 1951, emphasise the role of expert opinion in the development of recommendations. However, the organisation's guidelines, approved in 2003, emphasise the use of systematic reviews for evidence of effects, processes that allow for the explicit incorporation of other types of information (including values), and evidence-informed dissemination and implementation strategies. We examined the use of evidence, particularly evidence of effects, in recommendations developed by WHO departments.

Methods We interviewed department directors (or their delegates) at WHO headquarters in Geneva, Switzerland, and reviewed a sample of the recommendation-containing reports that were discussed in the interviews (as well as related background documentation). Two individuals independently analysed the interviews and reviewed key features of the reports and background documentation.

Findings Systematic reviews and concise summaries of findings are rarely used for developing recommendations. Instead, processes usually rely heavily on experts in a particular specialty, rather than representatives of those who will have to live with the recommendations or on experts in particular methodological areas.

Interpretation Progress in the development, adaptation, dissemination, and implementation of recommendations for member states will need leadership, the resources necessary for WHO to undertake these processes in a transparent and defensible way, and close attention to the current and emerging research literature related to these processes.

Introduction

Every year, WHO develops a large number of recommendations aimed at many different target audiences, including the general public, healthcare professionals, managers working in health facilities (eg, hospitals) or regions (eg, districts), and public policymakers in member states. These recommendations address a wide range of clinical, public health, and health policy topics related to achieving health goals. WHO's regulations emphasise the role of expert opinion in the development of recommendations. In the 56 years since these regulations were initially developed, research has highlighted the limitations of expert opinion, which can differ both across subgroups and from the opinions of those who will have to live with the consequences.^{1,8} Experts have also been known to use non-systematic methods when they review research, which frequently

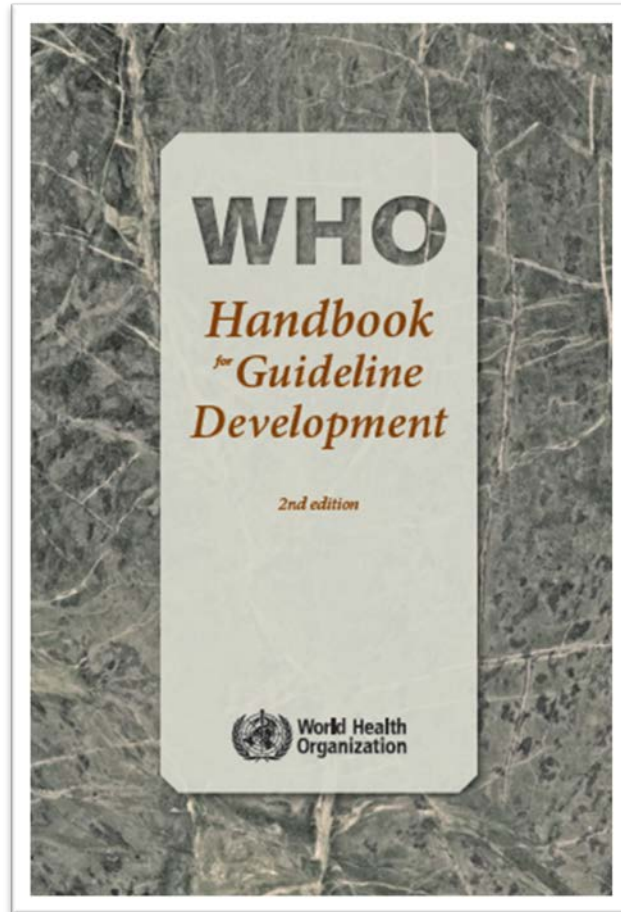
collection, analysis, and interpretation of the results. However, systematic reviews are only as good as the evidence that they summarise. There might be no evidence. When there is evidence, judgments are still needed about the quality and, especially for public health and health policy topics, its applicability in different contexts.⁹

Evidence of effects needs to be complemented by information about needs, factors that could affect whether effectiveness will be realised in the field, such as the available resources, costs, and the values of those who will be affected by the recommendations. Processes that allow for the explicit incorporation of these types of information, particularly values, have (like systematic reviews) emerged as central to the development of recommendations.^{8,10} Moving from evidence to recommendations requires judgments, particularly judgments about goals and about

WHO's Advisory Committee on Health Research (ACHR)

- 2005: established the Subcommittee on the Use of Research Evidence (SURE)
- 2006: 14 articles in Health Research Policy and Systems
- 2007: Oxman et al, Lancet 2007: 369: 1883-9.

WHO guideline development process



Procedures and standards for WHO guidelines

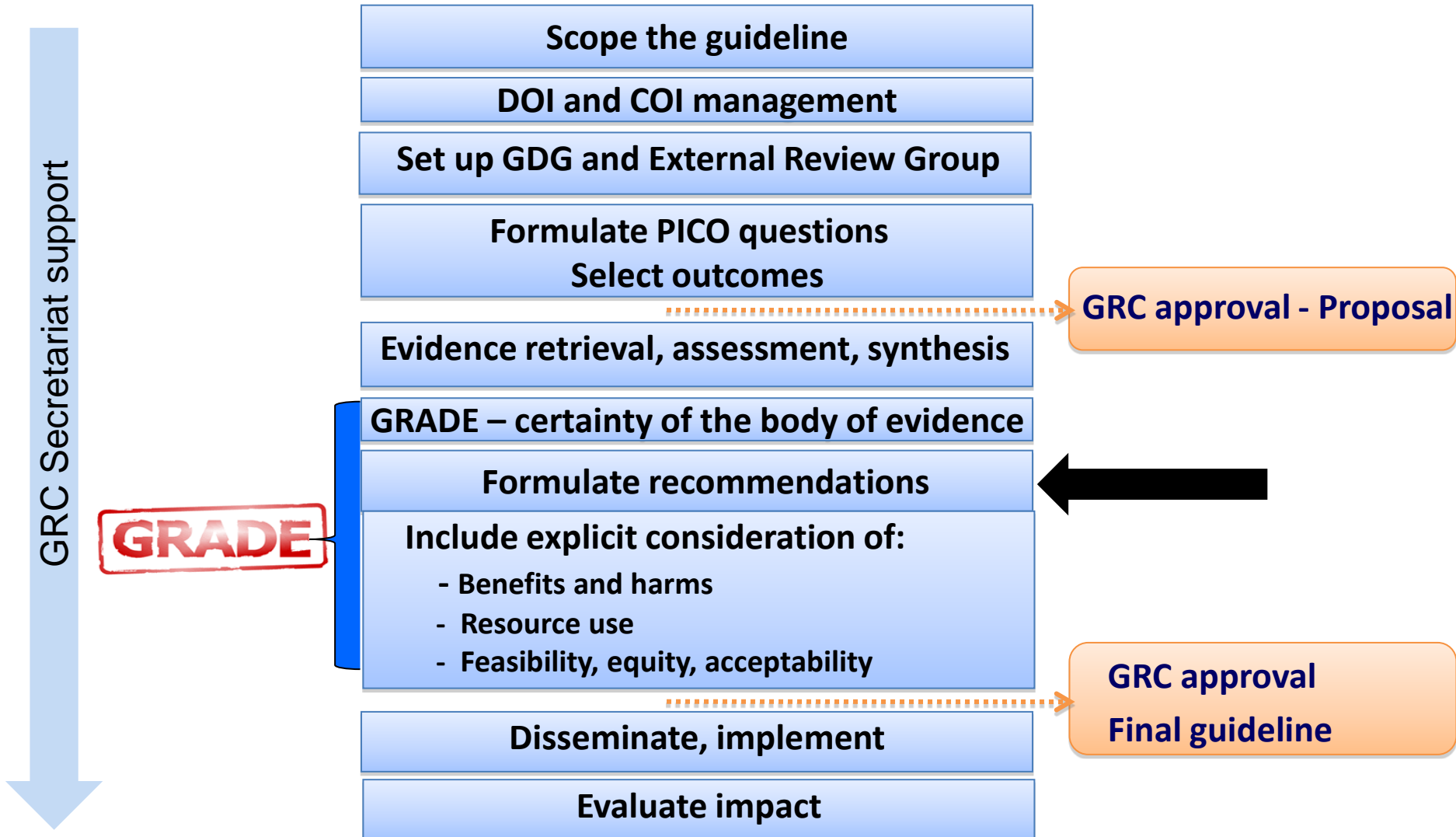
- Evidence-informed
- Transparent

Guidelines Review Committee Secretariat

Peer review feedback

Quality assurance process

WHO Guideline development process



What is a WHO guideline?

WHO guideline

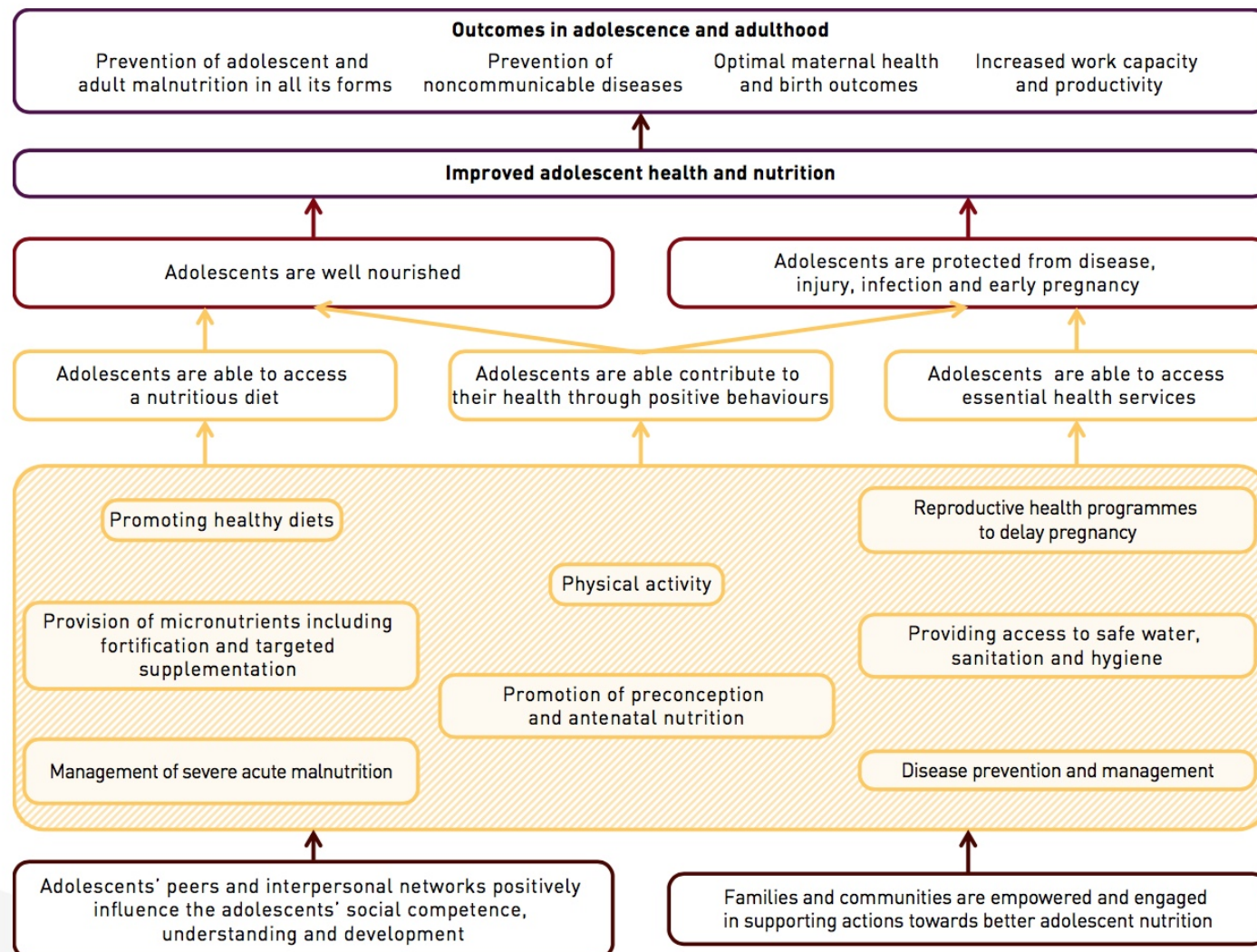
- is any document, whatever its title, that contains WHO recommendations about health interventions, whether they be clinical, public health or policy interventions

WHO recommendation

- Provides information about what policy-makers, health-care providers or patients should **do**.
- It implies a choice between different interventions that have an impact on health and that have ramifications for the use of resources.

Adolescent nutrition

Figure 1: Nutrition adolescents girls determinants framework



Effective actions for improving adolescent nutrition

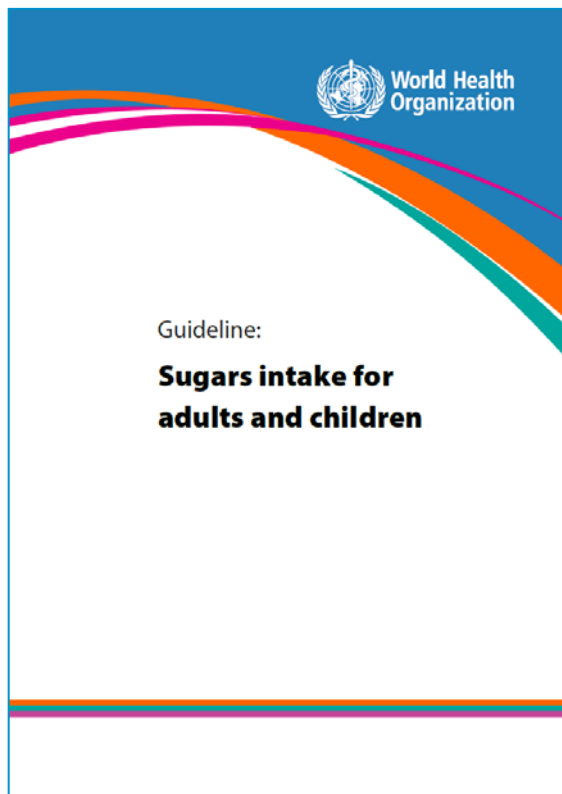


Recommendations for health and wellbeing

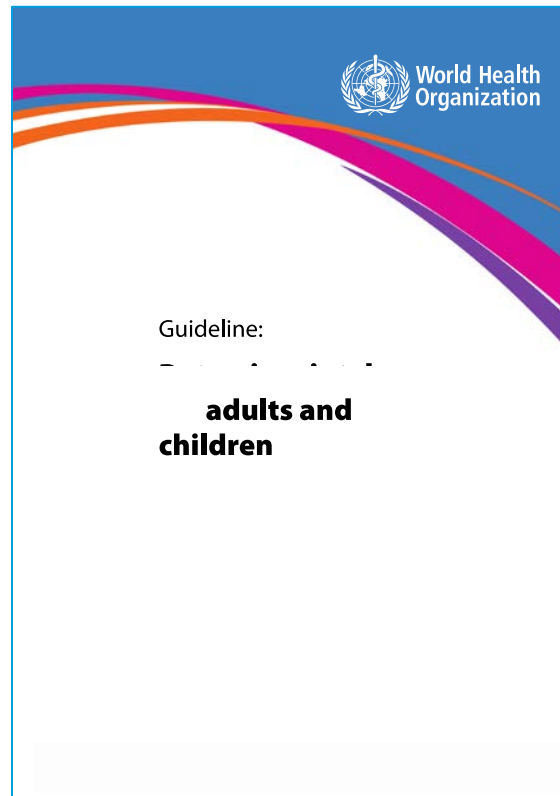
- 01** Promoting healthy diets in adolescents
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- 07** Promoting physical activity for adolescents

Promoting healthy diets

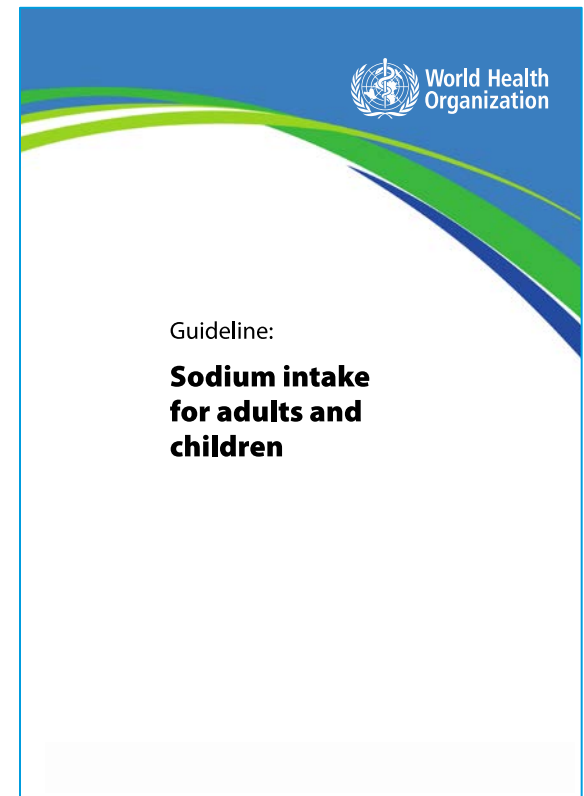
Sugar (2015)



Potassium (2012)



Sodium (2012)



Promoting healthy diets

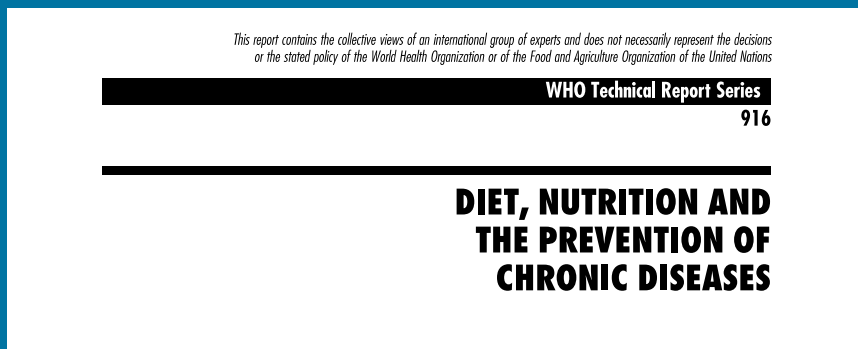
Marketing (2010)



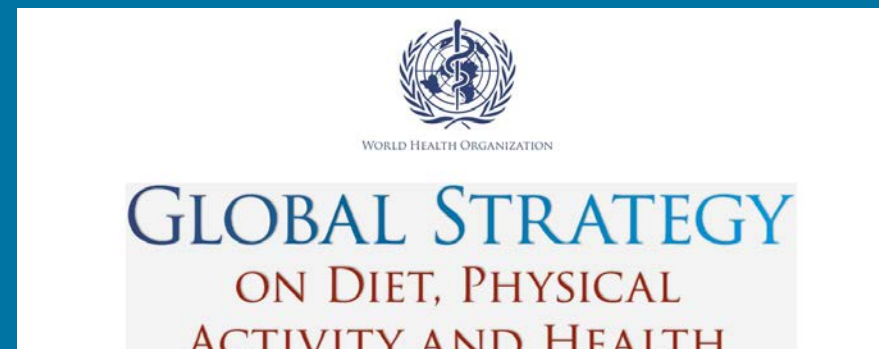
Diet and physical activity: what works (2009)



Joint WHO/FAO Expert Consultation (2003)



Global strategy on diet, physical activity (2004)



Effective actions for improving adolescent nutrition



Recommendations for health and wellbeing

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Micronutrients

Fortification of maize flour (2016)

WHO GUIDELINE:
**FORTIFICATION OF
MAIZE FLOUR AND
CORN MEAL WITH
VITAMINS AND
MINERALS**



Salt iodization (2014)

GUIDELINE: Fortification of food-grade
salt with iodine for the
prevention and control of
iodine deficiency disorders



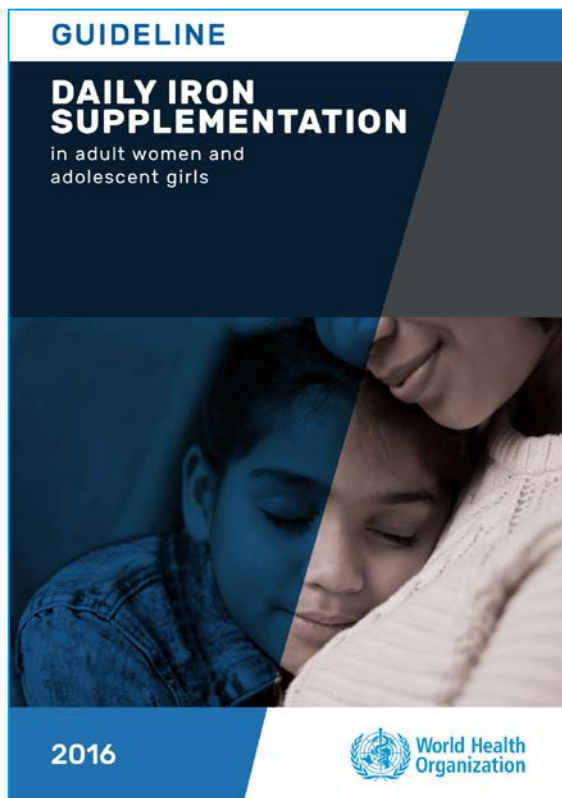
Serum and RBC folate (2015)

GUIDELINE:
OPTIMAL SERUM AND
RED BLOOD CELL FOLATE
CONCENTRATIONS IN WOMEN
OF REPRODUCTIVE AGE
FOR PREVENTION OF
NEURAL TUBE DEFECTS

Micronutrients

Daily iron supplementation

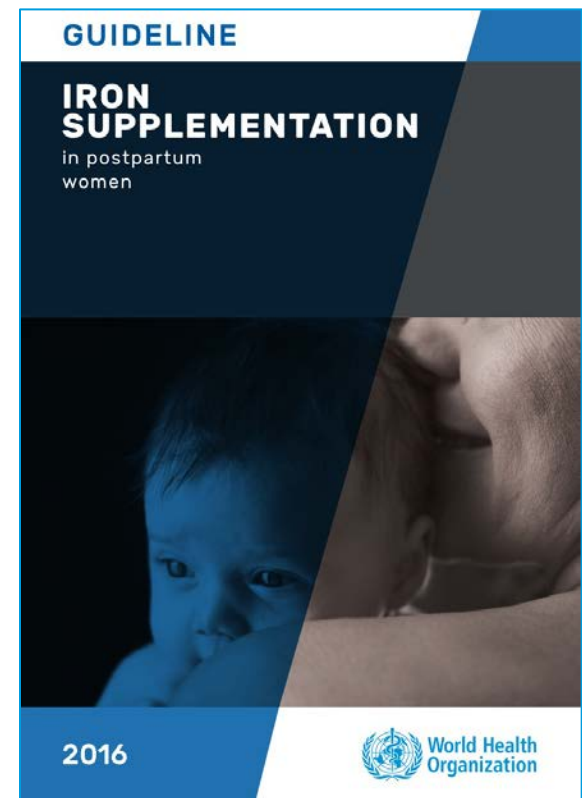
Adolescents (2016)



Children (2016)



Postpartum women (2016)



Micronutrients

Intermittent IFA for menstruating women (2011)

Guideline:

Intermittent iron and folic acid supplementation in menstruating women

Intermittent iron for children (2011)

Supplementation in preschool and school-age children

MNP for pregnant women (2015)

Guideline:

USE OF MULTIPLE MICRONUTRIENT POWDERS
FOR POINT-OF-USE FORTIFICATION OF FOODS CONSUMED BY PREGNANT WOMEN

Vitamin A for postpartum women (2011)

Guideline:

Vitamin A supplementation in postpartum women

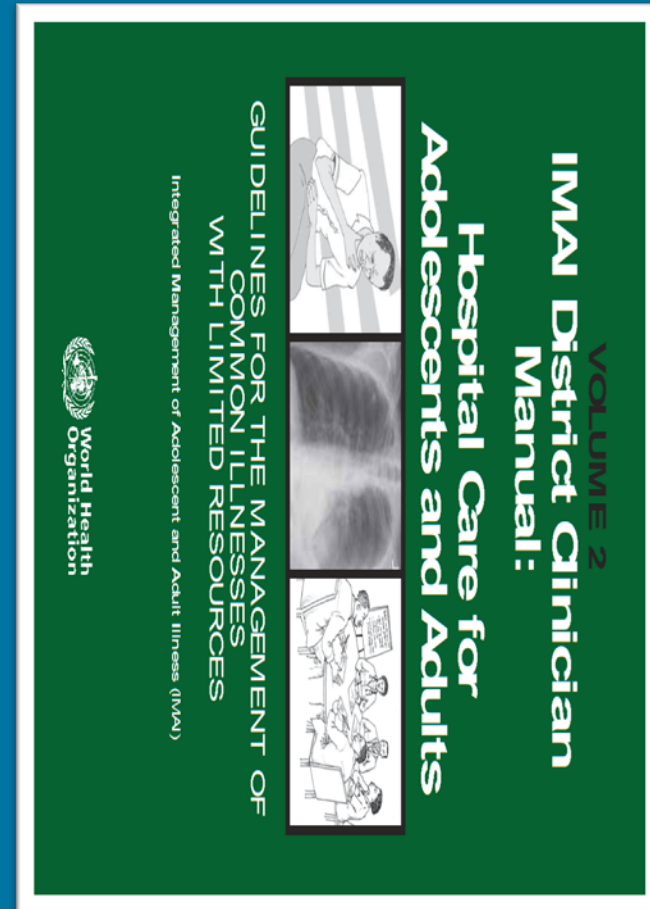
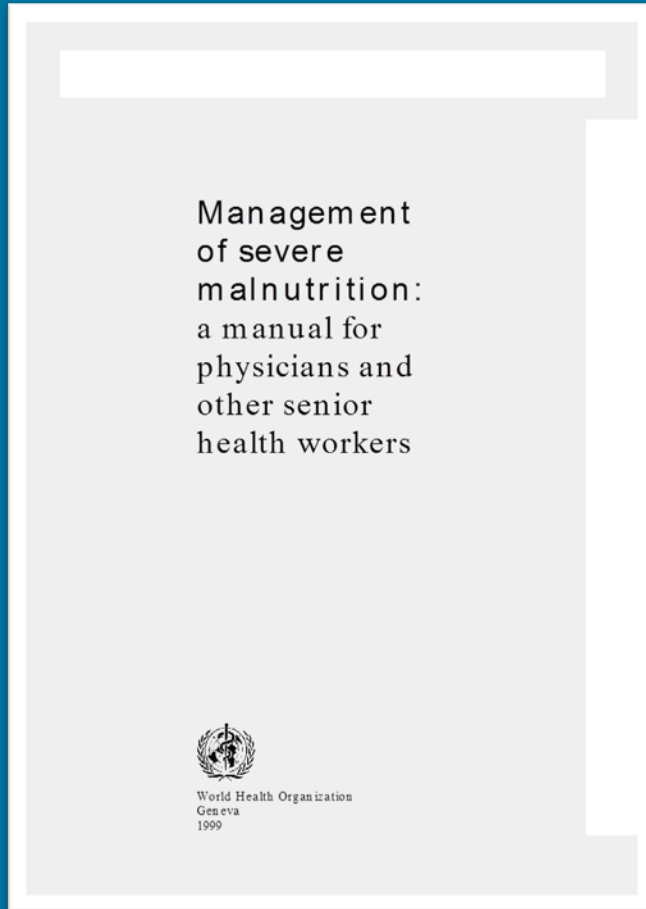
Effective actions for improving adolescent nutrition



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Management of SAM



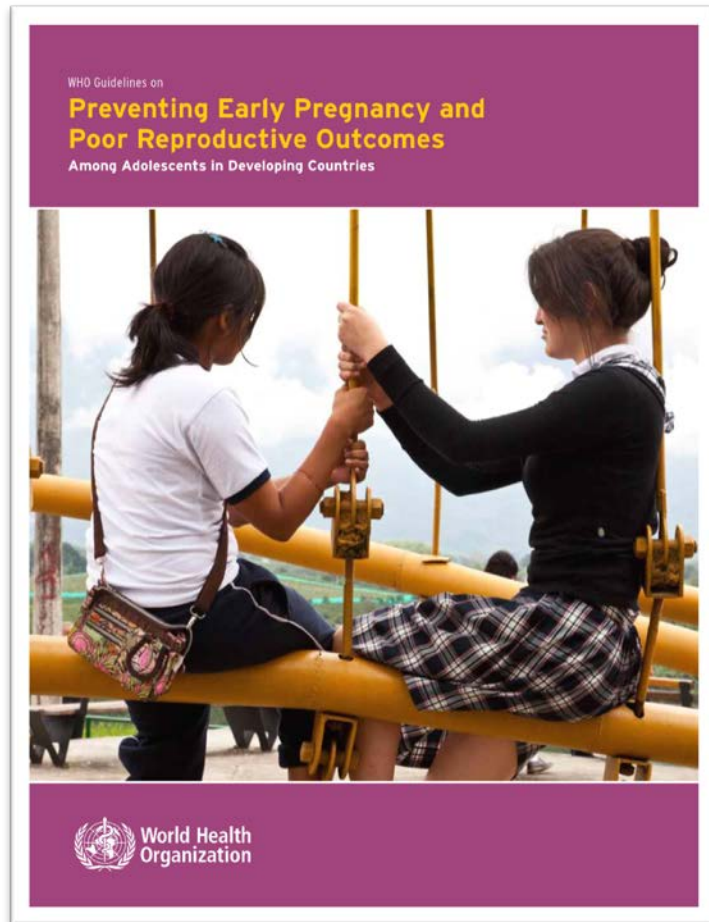
Effective actions for improving adolescent nutrition



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Delay adolescent pregnancy



Outcomes:

- Reduce marriage before the age of 18 years
- Reduce pregnancy before the age of 20 years
- Increase use of contraception by adolescents at risk of unintended pregnancy
- Reduce coerced sex among adolescents
- Reduce unsafe abortion among adolescents
- Increase use of skilled antenatal, childbirth and postnatal care among adolescents

Delay adolescent pregnancy

Policy brief (2012)

Policy brief



Expanding access to contraceptive services for adolescents

40  **years of innovation**
Over 40 years, WHO, UNFPA, UNICEF, WFP, and the World Bank have worked together to improve health, nutrition, and economic wellbeing in fragile and emergency situations.

World Health Organization

Policy and programmatic actions

- Enact policies requiring the provision of accurate, age-appropriate and comprehensive sexuality education for all adolescents.
- Eliminate social and non-medical restrictions on the provision of contraceptives to adolescents.
- Engage adolescents as full partners in designing, implementing and monitoring programmes for contraceptive information and service provision. Alongside this, draw upon the support of parents, and other influential adults for the provision of contraceptive information and services.
- Make available a full range of contraceptive methods through outlets that different groups of adolescents are likely to frequent, including social marketing outlets, educational and social facilities, and the health system.
- Ensure that health information systems gather, analyse and use age-disaggregated data on the need for, and use of, contraceptives.

Background

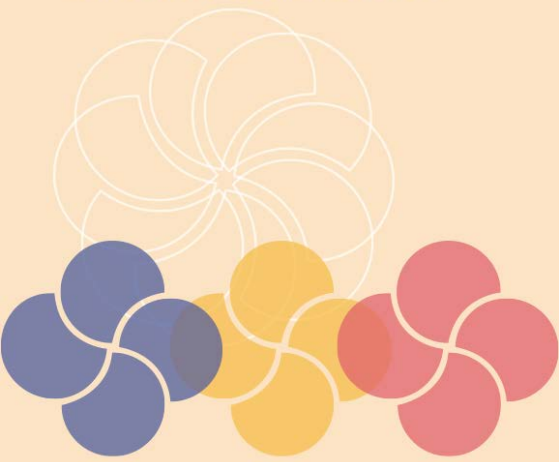
Adolescents, both unmarried and married, face many sexual and reproductive health risks stemming from early, unprotected, and unwanted sexual activity (1). Key factors underlying this issue are lack of access to sexuality education, and to accessible, affordable, and appropriate contraception. There is an urgent need to implement programmes to meet the contraception needs of adolescents, while dismantling the current barriers to adolescents from accessing services.

The number of sexually active adolescents is increasing globally. This is leading to a large and growing unmet need for contraceptive services appropriate to the unique needs of adolescents. Many individuals worldwide initiate sexual activity during their adolescent years within, or outside of, formal unions. The level and context of sexual activity among adolescents varies widely by sex and location. About 14% of adolescent girls in developing countries are married by the age of 15 years, and as many as 30% are married by age 18 (1). Adolescents who are married or are in a formal union need contraceptive services, because early pregnancy is associated with increased maternal and neonatal morbidity and mortality. However, social norms usually lead to women becoming pregnant soon after marriage. Sexually active adolescents who are not in a formal union also have an unmet need for contraceptives. This is a need that is often not acknowledged or measured. Moreover, substantial proportions of adolescents experience coercive or have transactional sex, and in such situations, have limited opportunities to protect themselves.

Some of the obstacles that adolescents face in obtaining contraceptives are also faced by adults; others are specific to adolescents. These barriers relate to availability, accessibility and acceptability. In many places, contraceptives are just not available to anyone. Where contraceptive services are available, adolescents (especially unmarried ones) may not be able to obtain them because of restrictive laws and policies. Even if adolescents are able to obtain contraceptive services they may not do so because of fear that their confidentiality may not be respected, or that health-care workers may be judgmental. Adolescents may not use contraceptives correctly and consistently because of limited or incomplete knowledge of how to use them, misperceptions about their effects, and fears of the reactions of others.

Framework (2014)


Framework for ensuring human rights in the provision of contraceptive information and services




World Health Organization

Implementation guide (2015)

Ensuring human rights within contraceptive service delivery: implementation guide



World Health Organization



Effective actions for improving adolescent nutrition

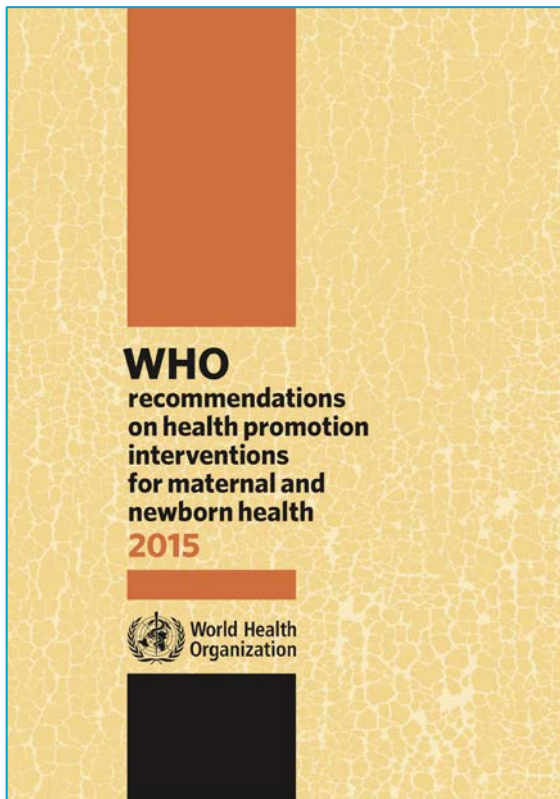


Recommendations for health and wellbeing

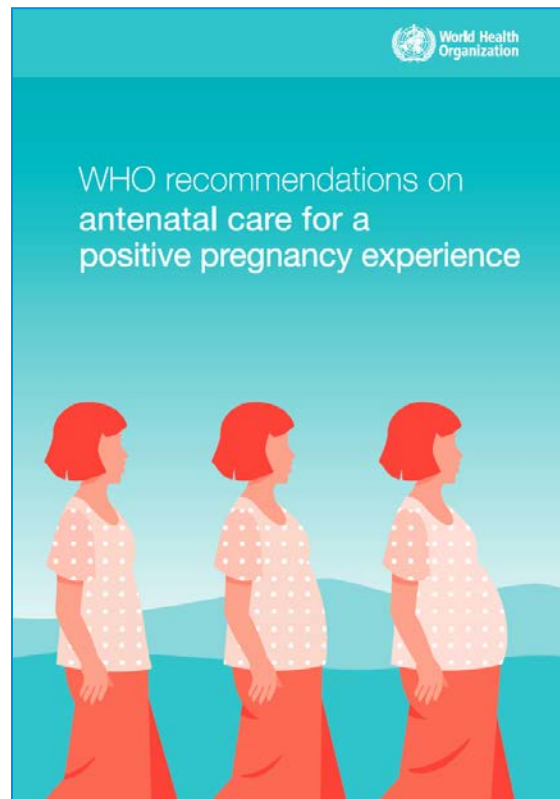
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Preconceptional and antenatal nutrition

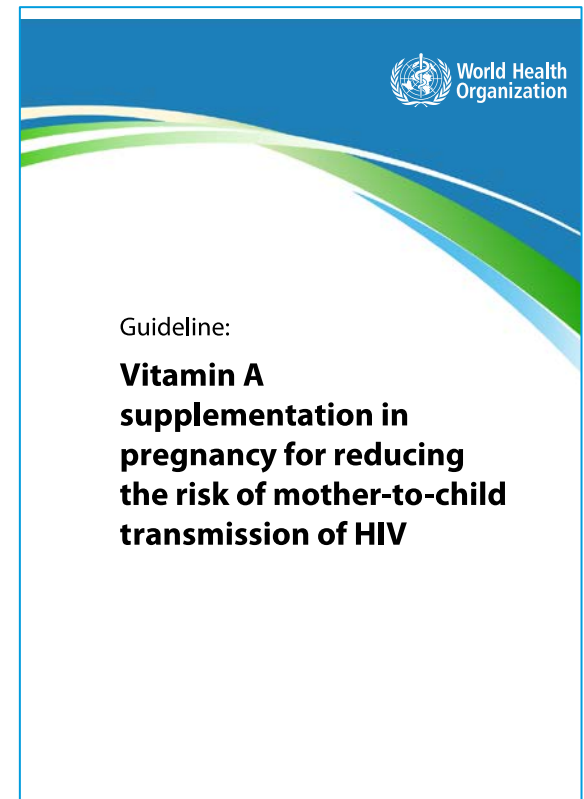
Maternal health (2015)



Positive pregnancy (2016)



Vitamin A for HIV (2011)



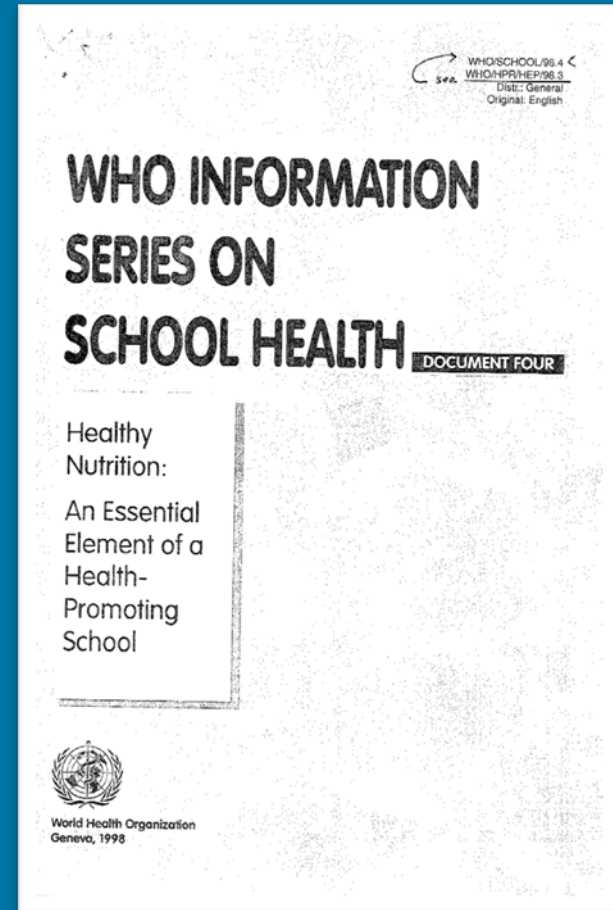
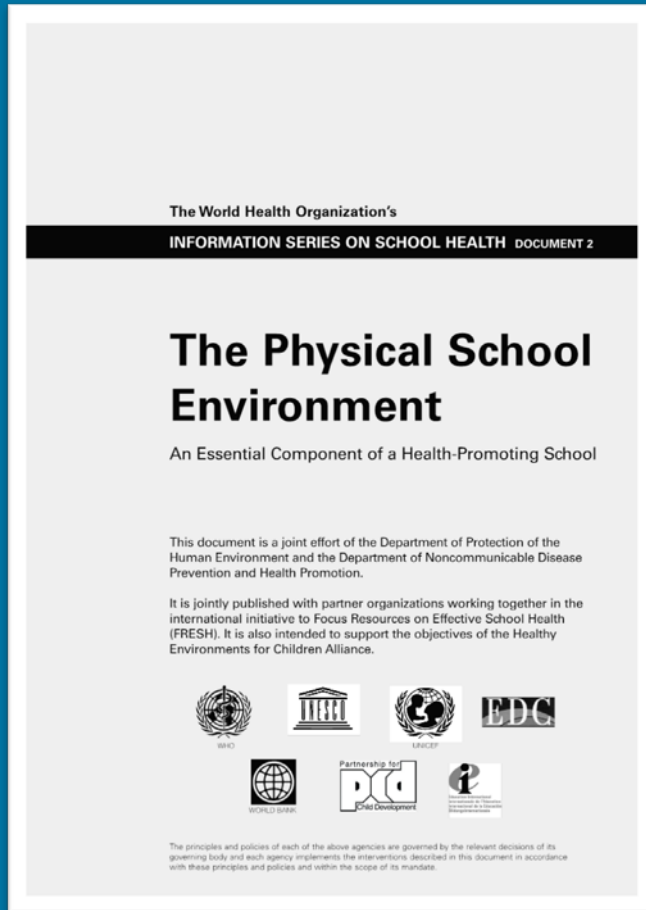
Effective actions for improving adolescent nutrition



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Access to safe WASH



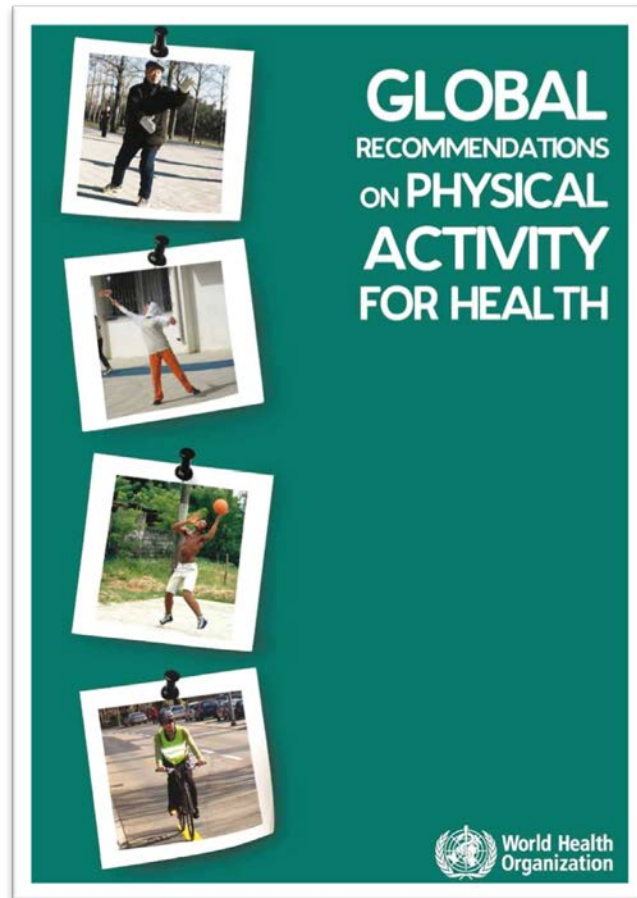
Effective actions for improving adolescent nutrition



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Physical activity



Age group: 5–17 years

Children and young people aged 5–17 years should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily.

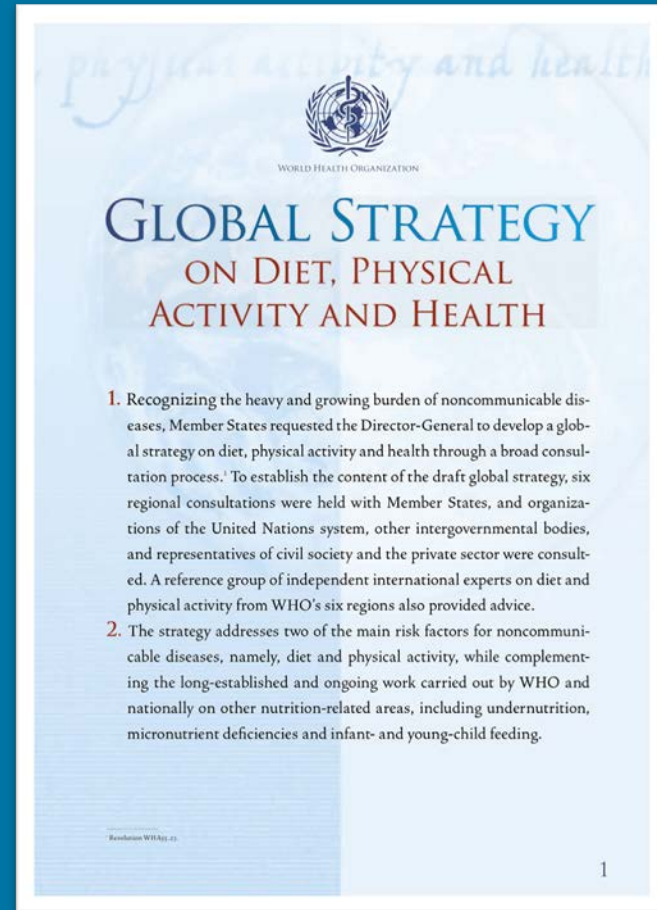
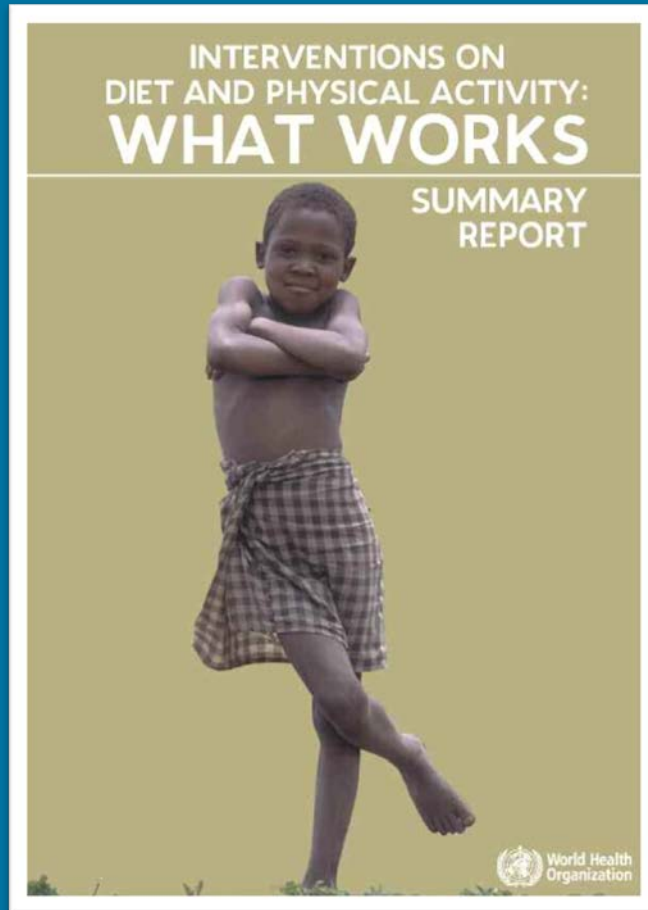
Physical activity of amounts greater than 60 minutes daily will provide additional health benefits.

Most of the daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least three times per week.

Age group: 18–64 years

Adolescents and adults aged 18–64 years should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week, or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week, or an equivalent combination of moderate- and vigorous-intensity activity.

Physical activity



Effective actions for improving adolescent nutrition

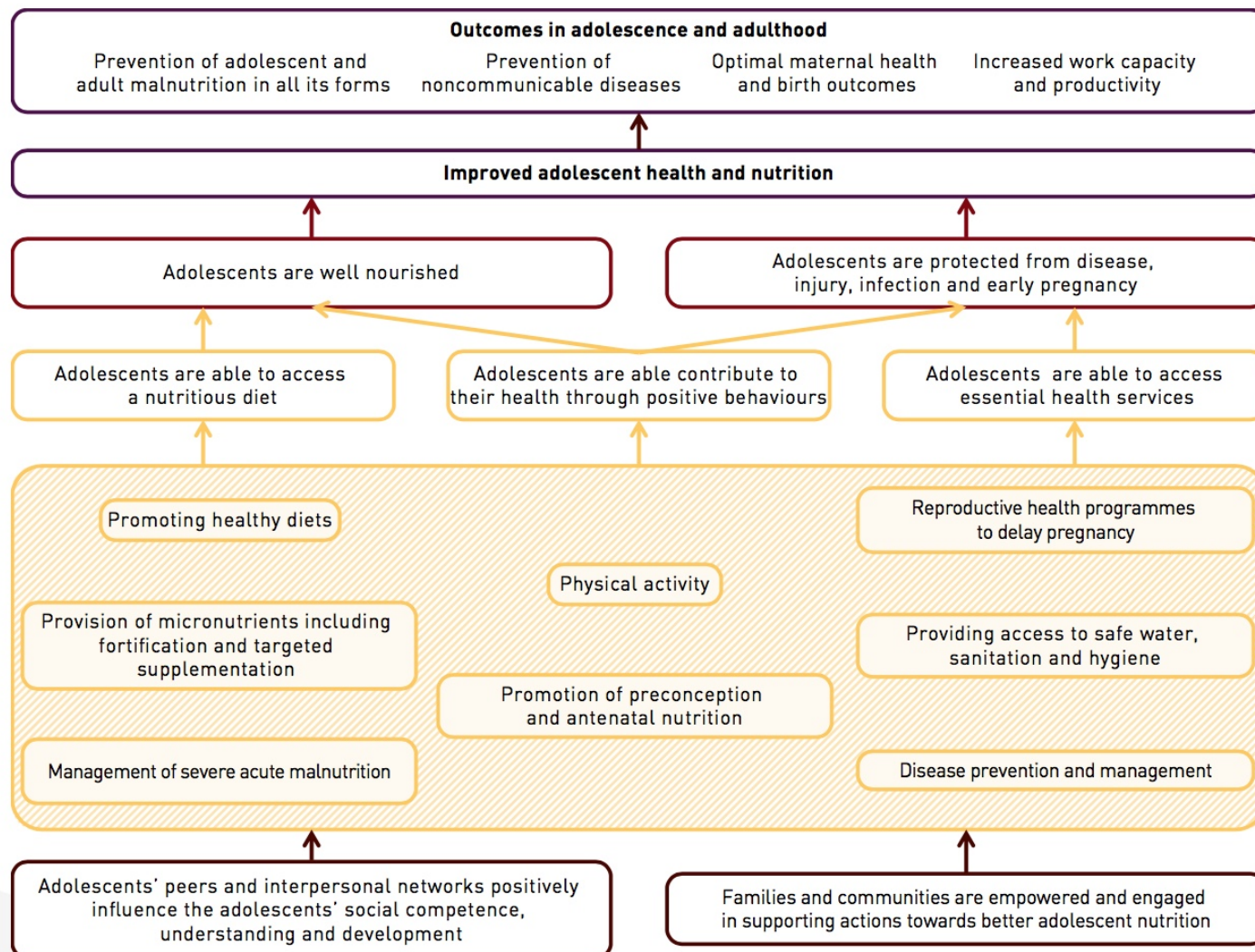


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Adolescent nutrition

Figure 1: Nutrition adolescents girls determinants framework



Implementation research

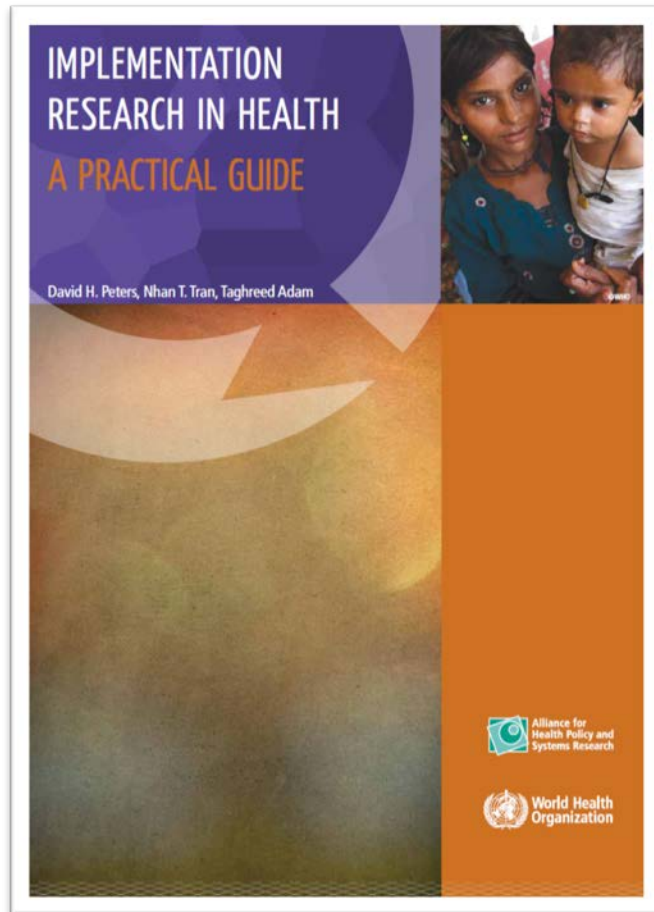
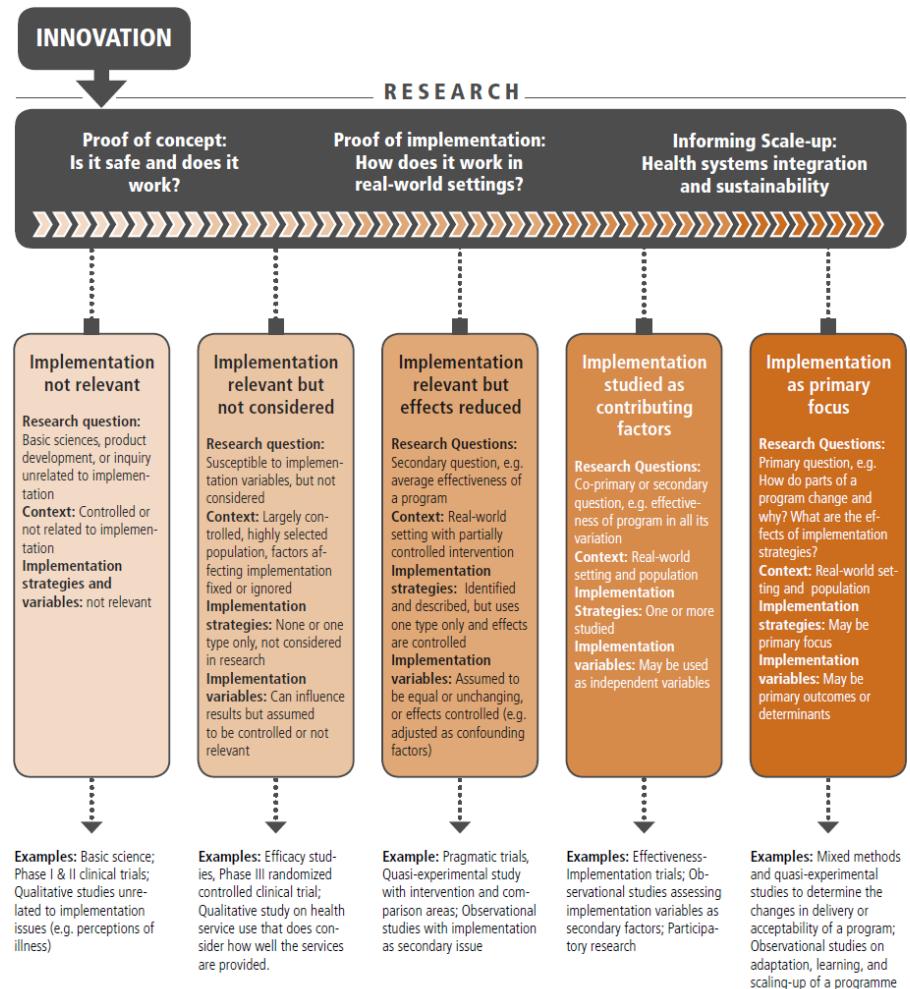
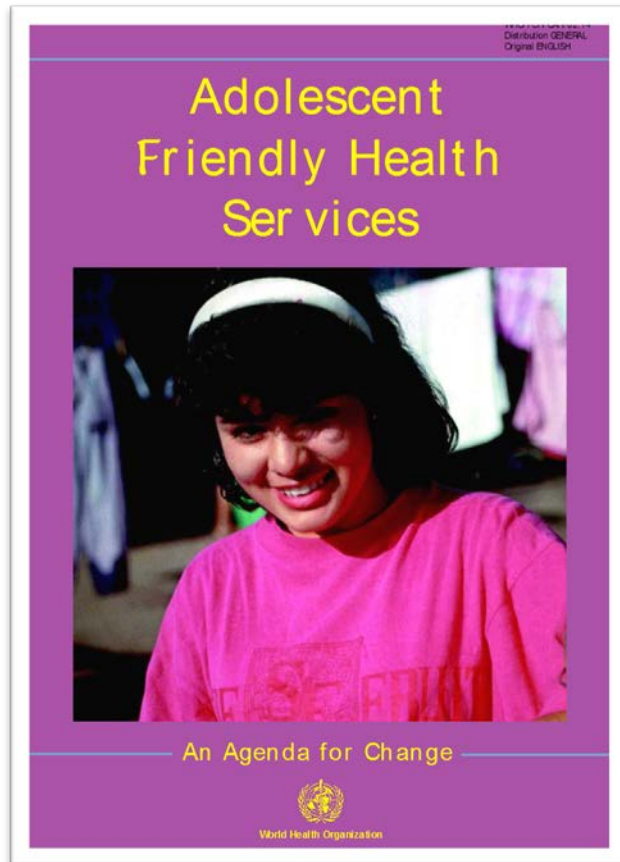


Figure 3. The continuum of implementation research



Adolescent-friendly health services – an agenda for change



Adolescent friendly health services need to be accessible, equitable, acceptable, appropriate, comprehensive, effective and efficient.

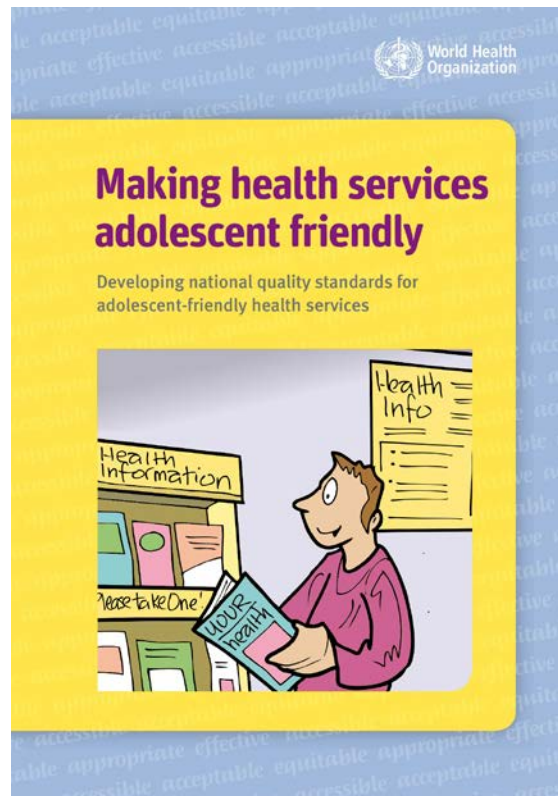
Adolescent-friendly health services

Quality assessment (2009)

Adolescent clients



Quality standards (2012)



Global standards (2015)



Global Accelerated Action for the Health of Adolescents (AA-HA!)

Guidance to Support Country Implementation



Adolescent health

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World Health Organization



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Maternal, newborn, child and adolescent health

Maternal, newborn, child and adolescent health

▼ Topics

- Maternal health
- Newborn health
- Child health
- Adolescent health**
- Quality of care
- ▶ Epidemiology, monitoring and evaluation

Adolescent health

WHO and partners recommend actions to improve adolescent health



16 May 2017 -- More than 3000 adolescents die every day from largely preventable causes, according to a new report from WHO and partners. *Global accelerated action for the health of adolescents (AA-HA!): Guidance to support country implementation* – assists governments in what to do – as well as how to do it – as they respond to the health needs of adolescents in their countries. Case studies show that what is being recommended actually can be done. The full document with case studies, a summary document, a comic book, brochure and infographics are available below.

Read the Global AA-HA! Guidance

News release: More than 1.2 million adolescents die every year, nearly all preventable

WHO

Adolescent nutrition



e-Library of Evidence for Nutrition Actions (eLENA)

eLENA

[A-Z list of interventions](#)

[Health conditions](#)

[Life course](#)

[Nutrients](#)

[Intervention type](#)

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Welcome to eLENA



The WHO e-Library of Evidence for Nutrition Actions (eLENA) is an online library of evidence-informed guidance for nutrition interventions.

eLENA is available in all six official languages of WHO. To view eLENA content in another language, click on the appropriate link at the top right of the web page, directly above the social media icons.

[— More about eLENA](#)

Adolescent nutrition


iTunes App Store

iTunes Preview Overview Music Video Charts

WHO ELENAmobile app

By AngloMediaSA

This app is only available on the App Store for iOS devices.



Description
Access the latest WHO nutrition guidelines and evidence-informed guidance for nutrition interventions, wherever you are, with eLENAmobile.

WHO ELENAmobile app Support ...More


What's New in Version 1.2.14
Addition of links between interventions and WHO global nutrition and diet-related NCD targets
Addition of systematic review summaries
Updated intervention category headings

Free
Category: Medical
Updated: Jun 16, 2017
Version: 1.2.14
Size: 18.1 MB
Language: English
Seller: AngloMediaSA
© World Health Organization 2016
You must be at least 17 years old to download this app.
Unrestricted Web Access

Compatibility: Requires iOS 8.0 or later. Compatible with iPhone, iPad, and iPod touch.


Customer Ratings
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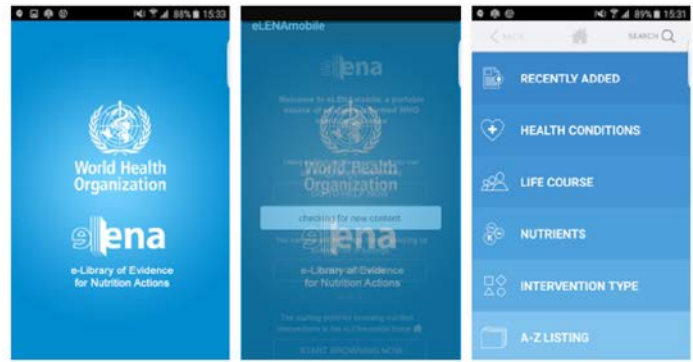
WHO eLENAmobile nutrition app

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**World Health
Organization**

Effective actions to improve adolescent nutrition



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Adolescent nutrition



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