

# 'Sprinkles': a new approach to reduce anaemia among children in India

**Submission date**  
12/09/2005

**Recruitment status**  
No longer recruiting

☐ Prospectively registered

☐ Protocol

**Registration date**  
21/12/2007

**Overall study status**  
Completed

☐ Statistical analysis plan

☒ Results

**Last Edited**  
25/02/2009

**Condition category**  
Haematological Disorders

☐ Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Dr Stanley Zlotkin

### Contact details

The Hospital for Sick Children  
555 University Avenue  
Toronto  
Canada  
M5G 1X8  
stanley.zlotkin@sickkids.ca

## Additional identifiers

ClinicalTrials.gov (NCT)  
NCT00213161

Protocol serial number  
GLH-63082

## Study information

Scientific Title

Establishing an iron supplementation strategy to reduce the prevalence of iron deficiency anaemia among infants and young children in India

### **Study objectives**

The response to a 14.25 mg iron dose from drops will be greater than the response to a similar iron dose from Sprinkles, and will be equivalent to either a 20 or 30 mg iron dose from Sprinkles (either as encapsulated ferrous fumarate or micronized ferric pyrophosphate).

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

1. Research Ethics Board of the Hospital for Sick Children, Toronto, Ontario (Canada) approved on the 16th February 2004 (ref: 0019970046)
2. Indian Council of Medical Research, New Delhi (India) approved on the 6th May 2004 (ref: IND/FRC/442/2004-IHD)

### **Study design**

Single centre, interventional, 5 arms, randomised cluster trial with study participant, study investigator, caregiver, outcome assessor, and data analyst blinded

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

### **Health condition(s) or problem(s) studied**

Anaemia

### **Interventions**

Three different doses of Sprinkles: 12.5 mg, 20 mg, and 30 mg of elemental iron, and two forms of iron (encapsulated ferrous fumarate and micronized ferric pyrophosphate) compared to the standard and recommended dose of iron drops in India (Fersoft drops -14.25 mg Fe), daily for 2 months.

### **Intervention Type**

Drug

### **Phase**

Not Applicable

### **Drug/device/biological/vaccine name(s)**

Sprinkles (encapsulated ferrous fumarate and micronized ferric pyrophosphate), Fersoft drops

### **Primary outcome(s)**

Haemoglobin, measured at 4 weeks, 8 weeks, 8 months after first dosing.

### **Key secondary outcome(s)**

1. Serum ferritin, measured at 8 weeks
2. Side effects, measured every 2 weeks

**Completion date**

01/12/2005

## Eligibility

**Key inclusion criteria**

1. 6 - 18 months of age, either sex
2. Anaemic (haemoglobin [Hb] 70 - 100 g/L)
3. Ingesting weaning food in addition to breast milk
4. Free from major illness (including symptomatic for malaria) and afebrile
5. Living within study area for the following two months
6. Parental consent obtained
7. Only one child per household in the study

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Child

**Lower age limit**

6 months

**Upper age limit**

18 months

**Sex**

All

**Key exclusion criteria**

1. Hb less than 70 or greater than or equal to 100 g/L
2. Not receiving any complementary foods
3. Receiving an iron supplement within two weeks of the date of enrolment
4. Chronic illness
5. Severely malnourished: weight for age z-score less than -3.0
6. Another child in the household is a subject in this study

**Date of first enrolment**

01/08/2004

**Date of final enrolment**

01/12/2005

# Locations

## Countries of recruitment

Canada

India

## Study participating centre

**The Hospital for Sick Children**

Toronto

Canada

M5G 1X8

# Sponsor information

## Organisation

Research Institute Hospital for Sick Children (Canada)

## ROR

<https://ror.org/057q4rt57>

# Funder(s)

## Funder type

Research organisation

## Funder Name

Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: GLH-63082)

# Results and Publications

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
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[Results article](#)

results

01/02/2007

Yes

No