

Calcium supplementation during pregnancy in low-intake populations

Submission date 19/03/2004	Recruitment status No longer recruiting	☐ Prospectively registered
		☐ Protocol
Registration date 01/04/2004	Overall study status Completed	☐ Statistical analysis plan
		☒ Results
Last Edited 10/11/2022	Condition category Pregnancy and Childbirth	☐ Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

Contact name
Dr José Villar

Contact details
World Health Organization
20 Avenue Appia
Geneva-27
Switzerland
CH-1211
-
villarj@who.int

Additional identifiers

Protocol serial number
WHO/HRP ID 98295

Study information

Scientific Title
Calcium supplementation during pregnancy in low-intake populations

Study objectives

The purpose of this trial was to determine whether calcium supplementation of pregnant women with low calcium intake reduces pre-eclampsia and preterm delivery.

Ethics approval required

Old ethics approval format

Ethics approval(s)

This trial was approved by:

1. The Scientific and Ethical Review Group at UNDP/UNFPA/WHO/World Bank Special Programme for Research, Development and Research Training in Human Reproduction
2. The WHO Secretariat Committee for Research into Human Subjects
3. The Institutional Review Boards of participating centres

Primary study design

Interventional

Study design

Multicentre double blind randomised controlled trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Pre-eclampsia

Interventions

Women were assigned randomly to receive:

1. Calcium-containing tablets (1.5 g/d), one tablet three times daily (at meal time, greater than 3 hours after any iron supplements)
2. Identical placebo

Treatment continued from enrolment to delivery. Treatment was discontinued when magnesium sulphate therapy was initiated to treat pre-eclampsia or when nephrolithiasis was diagnosed, but not when pre-eclampsia or hypertension was diagnosed.

Intervention Type

Supplement

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Calcium supplementation

Primary outcome(s)

1. Primary maternal outcome: incidence of preeclampsia and/or eclampsia
2. Primary neonatal outcome: preterm delivery

Key secondary outcome(s)

1. Early preterm delivery (less than 32 weeks of gestation)
2. Term low birth weight (less than 2500 g; greater than or equal to 37 weeks of gestation)

3. Hospitalisation of greater than 2 days
4. Greater than or equal to 7 days in the neonatal intensive care unit
5. Foetal, neonatal, and perinatal death

Completion date

01/06/2003

Eligibility

Key inclusion criteria

1. Nulliparous pregnant women less than 20 weeks gestation
2. Living in low calcium intake areas

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Female

Total final enrolment

8325

Key exclusion criteria

1. The presence of blood pressure greater than 140 and/or 90 mmHg at first antenatal visit
2. A history of chronic hypertension or renal disease
3. A history or signs and/or symptoms of nephrolithiasis, parathyroid disorders, and diseases that require digoxin, phenytoin, or tetracycline therapy

Date of first enrolment

01/11/2001

Date of final enrolment

01/06/2003

Locations

Countries of recruitment

Argentina

Egypt

India

Peru

South Africa

Switzerland

Viet Nam

Study participating centre
World Health Organization
Geneva-27
Switzerland
CH-1211

Sponsor information

Organisation

UNDP/UNFPA/WHO/World Bank - Special Programme of Research, Development and Research Training in Human Reproduction

ROR

<https://ror.org/01f80g185>

Funder(s)

Funder type

Research organisation

Funder Name

United Nations Development Programme (UNDP)/United Nations Population Fund (UNFPA) /World Health Organization (WHO)/World Bank - Special Programme of Research, Development and Research Training in Human Reproduction (HRP)

Results and Publications

Individual participant data (IPD) sharing plan

Not provided at time of registration

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type
[Results article](#)

Details

Date created
01/03/2006

Date added

Peer reviewed?
Yes

Patient-facing?
No