# Traditional/culinary uses of ginger

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### **Human Studies**

Author/Date	Study type	of	Exposure (ginger dose/day)	Study period	Length of Treatment (days)		Main result
Chittumma et al., 2007	Randomized double-blind controlled trial.	126/123	Ginger powder capsules (325 mg ×2, 3x/d, = 1950 mg/day).	4 days	4	Change in nausea and vomiting scores (3 symptoms on Rhodes index); occurrence of side-effects.	Only n side e observ difenc betwe groups

Ensiyeh et al., 2005	Double-blind randomised controlled trial.	Ginger powder capsules (500 mg 2×/d =1000 mg/day)	3 4 months	vomiting episodes; general response to treatment (5-item Likert scale); occurrence of side-	Two sponta aborti ginger 1 in Br no cor anoma observ babies to terr
	Double-blind	Ginger powder		Preference of treatment	One sponta aborti

capsules

(250 mg

4 times

1000

per day =

mg/day).

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outcome of

pregnancy.

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Double-blind

randomised

crossover

trial.

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Fischer-

Rassmussen

et al., 1991

Safety and effectiveness up to Various, of ginger for 187 12 Minimum Not Portnoi, 2003 pregnant not months nausea and specified. of 3 days. vomiting of specified. post women. birth. pregnancy (NVP).

Three malfor were r in the group ventri septal (VSD) lung abnor and ki abnor (pelvie One incide idiopa centra preco puber age 2 No sig differe betwe

> two gr terms births, sponta abortic stillbir therap abortic birth v or ges age.

Smith, 2004	Randomized, controlled equivalence trial.	291 women, less than 16 weeks pregnant.	1.05 g ginger.	3 weeks.	3 weeks.	Ginger verses B6 for the treatment of nausea or vomiting in pregnancy.	Three sponta abortio ginger 9 abor B6 gro
Vutyavanich, 2001	Double blind	32	Ginger powder capsules (250 mg 4x/day =1000 mg/day).	5 months.	4	Severity of nausea (VAS 0-10); number of vomiting episodes; general response to treatment after 1 week (5-item Likert scale); occurrence of side-effects and adverse pregnancy outcomes.	No sig advers effects ginger pregna outcor

# **Human studies - Platelet Aggregation**

Author/date	Study	Population/stu	dy Study	Exposure	Outcome
Author/date	design	size	<b>Duration</b>		

Bordia <i>et al.,</i> 1997	Placebo controlled trial.	Patients with confirmed myocardial infarction N = 60.	3 months. Outcomes measured at: baseline, 1.5 months and 3 months.	Dose: 4g per day Unstandardised capsules.	Platelet aggre Agonist(s): Al Epi.
Bordia et al., 1997	NA	NA	NA	NA	Fibrinogen;
Bordia et al., 1997	NA	NA	NA	NA	Fibrinolytic a
Lumb. 1994	Randomised, double- blinded placebo- controlled crossover trial.	Healthy male volunteers N=8.	Total study period: 2 x 1 day, at least 14 days washout period. Outcomes measured immediately before, 3 hrs, and 24 hrs post consumption of ginger.	Dose: 2g (4 x 500 mg) dried ginger per day Unstandardized capsules.	Platelet aggre Agonist(s): A collagen, rist ADP; Bleedin Platelet coun Thromboelas

Srivastava 1989	Open-label single-arm trial.	Healthy female volunteers, N = 7.	Total study period: 7 days. Outcomes measured at baseline and 7 days post-consumption.	Dose: 5g raw ginger per day.	Platelet thror B2 production
					Synergistic e

72 days.

ginger and n

on anti-plate

aggregation

human volun hypertensive

1 g ginger (+

nifedipine).

10 mg

## In vivo studies

Young et al., Not

2006

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specified.

	Tost	Ctudy	Characterisation	Main	
<b>Author</b>	Test System	size Ex	Exposure of test	<b>Duration outcome</b> Out	
			substance	measure	

Wilkinson Dawley 43 water on rats, F. days 6-  15.  Oral,  Oral,  Oral,  Sprague-  Dawley 43 water on rats, F.  Oral,  Oral,  20 g/L or 50 g/L  ginger tea.  20 days.  developmental to be toxicity.  heacon grows structions and feture of the control of the contro	reated froups 2 imes th he cont exposed etuses
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## **Effect on Platelet Aggregation**

Author	Test System	Study size	Exposure	Characterisation of test substance	Main outcome measure	Outcome
Srivastava 1989	Open- label single- arm trial.	Healthy female volunteers, N = 7.	Total study period: 7 days. Outcomes measured at baseline and 7 days post-consumption.	per day.	Platelet thromboxane B2 production.	Ginger consumption resulted in a 37% inhibition of thromboxar B2 production (p<0.01).