

Sweet as Candy without the Consequences? An Investigation of the Glycaemic Index of Palm Sugar

Published: 22-11-2010

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The primary objective of this study is to determine the glycaemic index of palm sugar in healthy adults

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Glucose metabolism disorders (incl diabetes mellitus)
Study type	Interventional

Summary

ID

NL-OMON34273

Source

ToetsingOnline

Brief title

LIPS

Condition

- Glucose metabolism disorders (incl diabetes mellitus)

Synonym

diabetes

Research involving

Human

Sponsors and support

Primary sponsor: Wageningen Universiteit

Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Arenga, Glucose, Glycaemic index, Palm Sugar

Outcome measures

Primary outcome

Blood glucose concentrations taken at baseline and at increasing intervals up to and including 120 minutes after ingestion of the sugar to calculate the glycaemic index of palm sugar.

Secondary outcome

Not applicable

Study description

Background summary

There is no scientific evidence available regarding the glycaemic index of palm sugars. It has also been claimed by many that the glycaemic index of palm sugar is extremely low (less than 30). Therefore a study determining the glycaemic index of palm sugar is warranted to provide evidence for or against these claims.

Hypothesis: The GI of palm sugar is approximately 68; equal to that of sucrose which is 68.

Study objective

The primary objective of this study is to determine the glycaemic index of palm sugar in healthy adults

Study design

Double blind randomized cross over design

Intervention

On each of the five measurement days study participants will receive either 50 g of palm sugar, sucrose or glucose which they need to ingest within 5 to 10

minutes. At time points 0, 15, 30, 45, 60, 90, 120 minutes¹ blood sample will be taken. On the first and last day of the study the participants will receive glucose on the other 3 days they will receive either palm, sucrose or glucose in a randomised order.

The test sugar, palm sugar, is produced in Sumatra Indonesia and has been made for human consumption.

Study burden and risks

This intervention is non-therapeutic to the test subject. During the intervention a standard lancing will be used by a trained investigator to take seven blood samples per session. As a result of this, or the fasting, participants will have small wounds on their fingers and may experience feelings of light-headedness, dizziness or fainting. The risks are however minimal. The sugar used in this study is produced for human consumption, and therefore the risk and burden to the participants for participating in this study can be considered minimal.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

Healthy as judged by the participant;

Aged 18 to 35

Exclusion criteria

Pregnant or lactating females;

Presence of a chronic disease such as diabetes, cardiovascular illness, dysmetabolic syndrome;

$18.5 > \text{BMI} > 25$;

Allergy or intolerance to palms or coconuts;

Weight loss or gain of more than 5 kg in the last two months

Fasting blood glucose levels <100 mg/dl or 5.6 mmol/l;

Smokers;

Use of medications other than birth control;

Previous problems with blood sampling

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Basic science

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	22-11-2011
Enrollment:	20
Type:	Actual

Ethics review

Approved WMO	
Date:	22-11-2010
Application type:	First submission
Review commission:	METC Wageningen Universiteit (Wageningen)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL33657.081.10