# The effectivness of camel milk in autism spectrum disorders

Submission date 07/10/2010	<b>Recruitment status</b> No longer recruiting	<ul> <li>Prospectively registered</li> <li>Protocol</li> </ul>
<b>Registration date</b> 12/04/2011	<b>Overall study status</b> Completed	<ul> <li>Statistical analysis plan</li> <li>Results</li> </ul>
Last Edited 18/04/2011	<b>Condition category</b> Mental and Behavioural Disorders	<ul> <li>Individual participant data</li> <li>Record updated in last year</li> </ul>

### Plain English summary of protocol

Not provided at time of registration

## Study website

http://www.twahud.com

## **Contact information**

**Type(s)** Scientific

**Contact name** Prof Laila AL-Ayadhi

#### **Contact details**

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# Additional identifiers

EudraCT/CTIS number

**IRAS number** 

#### ClinicalTrials.gov number

Secondary identifying numbers 2011-2

# Study information

#### Scientific Title

The therapeutic possibilities of camel milk in autism spectrum disorders: a longitudinal interventional single-blinded single centre trial

#### Study objectives

1. To investigate the benefits and effect of camel milk as an interventional strategy in autistic children

2. To determine the efficiency of camel milk as an intervention method in reducing food allergy symptoms seen in autistic children (diarrhoea, vomiting, skin rashes, etc.)

#### Ethics approval required

Old ethics approval format

#### **Ethics approval(s)** Institutional Review Board approved on 23rd March 2011 (ref: 11/2967/IRB)

**Study design** Longitudinal interventional single-blinded single centre trial

## Primary study design

Interventional

**Secondary study design** Non randomised controlled trial

**Study setting(s)** Other

**Study type(s)** Treatment

#### Participant information sheet

Not available in web format, please contact Professor Al-Ayadhi [ayadh2@gmail.com] to request a patient information sheet

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

Autism spectrum disorders

#### Interventions

This project will be conducted on autistic children (60) with typical behavioural disorders (divided into 2 groups, group 1 will receive cold pasteurised camel milk, group 2 will receive boiled camel milk).

The children will be assessed by a psychologist and a physician who are expert in autism diagnosis. Written informed consent will be obtained from the parents of the children. We will study autistic children with typical behaviour who did not benefit from conventional treatment. A blood sample will be taken (EDTA and plain tubes).

Camel milk will be obtained by the Autism Research and Treatment Centre from a source that will be hygienic and the milk will be tested for bacterial and viral contamination before dispensing to the children. The parents will be instructed not to heat the milk, which would destroy the immunoglobulins and protective proteins therein.

The parents will report daily on the progress of their children. Milk will be supplied frozen and thawed as needed (without adverse effects on the milk, which returns to its initial solution). The milk will replace all other foods for 2 weeks, after which other food can be gradually added to the diet as chosen by the parents.

Resulting information will be used as a tool for the treatment of autism spectrum disorder which would be validated by large-scale clinical trials.

Intervention Type

Drug

**Phase** Not Applicable

Drug/device/biological/vaccine name(s) Camel milk

#### Primary outcome measure

- 1. Less allergy
- 2. Increased attention
- 3. Increased concentration

Outcomes assessed at baseline, 3 and 6 months, using the following tools:

- 1. Parent Questionnaire
- 2. Social Responsiveness Scale (SRS)
- 3. Childhood Autism Rating Scale (CARS)
- 4. Autism Treatment Evaluation Checklist (ATEC)

#### Secondary outcome measures

- 1. Improve general health
- 2. Improve social relation
- 3. Improve academic performance

Outcomes measures immediately following intervention, and 3 and 6 months afterwards.

**Overall study start date** 10/01/2011

**Completion date** 10/01/2013

# Eligibility

#### Key inclusion criteria

1. Children with autism spectrum disorders (ASD) confirmed by Autism Diagnostic Observation Schedule (ADOS) and Developmental, Dimensional and Diagnostic Interview (3DI) 2. Aged between 4 and 15 years, either sex 3. All simplex cases

#### Participant type(s)

Patient

## Age group

Child

#### Lower age limit 4 Years

## Upper age limit

15 Years

Sex Both

Target number of participants 60

#### Key exclusion criteria

- 1. Fragile X gene study
- 2. Tuberous sclerosis
- 3. Angleman syndrome
- 4. Other serious neurological conditions (e.g., seizures)
- 5. Psychiatric (e.g., bipolar disorder) or known medical conditions

Date of first enrolment 10/01/2011

Date of final enrolment 10/01/2013

# Locations

Countries of recruitment Saudi Arabia

Study participating centre

Autism Research and Treatment Centre Riyadh Saudi Arabia 11461

# Sponsor information

**Organisation** King Abdul Aziz City for Science and Technology (KACST) (Saudi Arabia)

#### Sponsor details

Autism Research and Treatment Centre Sheikh Al-Amoudi Autism Research Chair Department of Physiology (29) Faculty of Medicine King Saud University PO Box 2925 Riyadh Saudi Arabia 11461

**Sponsor type** Research organisation

Website http://twahud.com

ROR https://ror.org/05tdz6m39

# Funder(s)

**Funder type** Research organisation

**Funder Name** King Abdul Aziz City for Science and Technology (KACST) (Saudi Arabia) - Autism Research and Treatment Centre (ART Centre)

# **Results and Publications**

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration