Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Effect of Inulin, Fructooligosaccharide and Poly dextrose fortification on Physico-chemical, Rheological and Organoleptic properties of Clear Apple Juice among students of Tabriz university of medical science for six month

Protocol summary

Summary

1) Objectives: Prebiotic products have great health benefits for the people. Clear apple juice is a beverage widely consumed in a world. The aim of the present study is to produce a type of prebiotic clear apple juice which not only exerts the expected health benefits for the people, but also being better than the conventional type, regarding physicochemical, rheological and sensory characteristics. then the product will be assessed for the mentioned structures. 2) Design: First 9 type of prebiotic clear apple juice using different dosages of the prebiotic compounds and a control type will be prepared. In this study to attain prebiotic characteristics in the products, 2.5%, 3.5% and 4.5% inulin, 2.5%, 3.5% and 4.5% fructooligosaccharide, and 2.5%, 3.5% and 4.5% poly dextrose will be used. Control sample (containing no prebiotic substance) will be produced as well. Chemical tests and rheometer will be used to assess physicochemical and rheological characteristics of the products respectively. Sensory evaluation of the products will be performed by 32 panelists. A written consent will be obtained from all the subjects prior to the intervention. 3) Setting and conduct: For sensory evaluation of the 10 types of clear apple juice 100 cc of the sample will be given to the subjects who will be unaware of the type of clear apple juice they consume each time. After eating each sample, the relevant questionnaire designed on the basis of Hedonic system, will be completed by the participant. Different of the clear apple juice will be assessed on different days. Each of the samples will be consumed only once by each participant (all in all 10 times of intaking the clear apple juice prepared). Data will be analyzed using SPSS ver.13.5. 4) Participants including major eligibility criteria: The participants should be devoid of any kinds of diseases (especially a cold) and should not smoke. 5) Intervention: 100 cc of each type of 9 prebiotic clear apple juice with different dosages of inulin, fructooligosaccharide and poly dextrose, and a control type of clear apple juice. 6) Main outcome measures (variables): Sensory evaluation and compares each of the two types of clear apple juice.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201301155554N9**
Registration date: **2013-04-21, 1392/02/01**
Registration timing: **registered_while_recruiting**

Last update:
Update count: **0**

Registration date

2013-04-21, 1392/02/01

Registrant information

Name
Aziz Homayouni
Name of organization / entity
Tabriz University of Medical Scienses
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Iran (Islamic Republic of)
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Recruitment status

Recruitment complete

Funding source

Research Council of Tabriz University of Medical Sciences

Expected recruitment start date
2013-04-09, 1392/01/20
Expected recruitment end date
2013-10-12, 1392/07/20
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Effect of Inulin, Fructooligosaccharide and Poly dextrose fortification on Physico-chemical, Rheological and Organoleptic properties of Clear Apple Juice among students of Tabriz university of medical science for six month

Public title
Physico-chemical, Rheological and Organoleptic properties of Clear Apple Juice prepared with Inulin, Fructooligosaccharide and Poly dextrose in comparison to the conventional Clear Apple Juice
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria: Not having any diseases (including a cold); Not smoking; exclusion criteria: Having any diseases (including cold); Smoking.
Age
From **20 years** old to **60 years** old
Gender
Both

Phase
2-3
Groups that have been masked
No information
Sample size
Target sample size: **10**
Randomization (investigator's opinion)
N/A
Randomization description
Blinding (investigator's opinion)
Single blinded
Blinding description
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Tabriz University of Medical Sciences
Street address
Golbad Avenue
City
Tabriz
Postal code
5166614711
Approval date
2013-01-15, 1391/10/26
Ethics committee reference number
55555

Health conditions studied

1

Description of health condition studied
Healthy people
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Sensory evaluation and compares each of the two types of clear apple juice
Timepoint
Immediately after taking 100 cc of each of the two types of clear apple juice
Method of measurement
Using questionnaires

Secondary outcomes

empty

Intervention groups

1

Description
100 cc of Clear Apple Juice made with Inulin, Polydextrose and Fructooligosaccharide
Category
Prevention

2

Description
100 cc of Normal Clear Apple Juice
Category
Prevention

Recruitment centers

1

Recruitment center
Name of recruitment center
Tabriz University of Medical Science

Full name of responsible person
Doctor Aziz Homayouni Rad
Street address
Golbad Avenue
City
Tabriz

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice chancellor for research, Tabriz University of Medical Sciences
Full name of responsible person
Dr. Mohammad Alizadeh
Street address
Golbad Street, Atar Neishaburi Avenue
City
Tabriz
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice chancellor for research, Tabriz University of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
Tabriz University of Medical Sciences
Full name of responsible person
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Position
Assistant professor of department of food science and technology
Other areas of specialty/work
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Person responsible for scientific inquiries

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Person responsible for updating data

Contact

Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty