

Description

This bibliographic database, produced by the National Agricultural Library, consists of worldwide literature citations for journal articles, monographs, proceedings, theses, patents, translations, audiovisual materials, computer software, and technical reports pertaining to all aspects of agriculture and related fields. Since 1985, the CAB Thesaurus has been used to select controlled vocabulary terms for subject indexing. Library of Congress Subject Headings are used as controlled vocabulary for cataloging records.

Subject Coverage

- Agricultural products
- Animal sciences
- Biotechnology
- Farm management
- Food and nutrition
- Horticulture
- Pesticides
- Rural sociology
- Soil sciences
- Veterinary medicine
- Wildlife
- Zoology

Date Coverage

1970-present

Update Frequency

Monthly

Geographic Coverage

International

Document Types

- Books
- Journal Articles
- Patents
- Reports
- Standards

Publisher

AGRICOLA is produced by the National Agricultural Library (NAL) of the U.S. Department of Agriculture (USDA):

National Agricultural Library (NAL)
of the U.S. Department of Agriculture (USDA)
Information Systems Division
NAL-USDA, 5th Floor
Beltsville, MD 20705
USA

Telephone: 1-301-504-6813 – questions about file structure
1-301-504-5479 – questions about searching
1-301-504-6829 – questions about indexing
Fax: 1-301-504-7473



Citation/Abstract < Back to results

Add to selected items Save to My Research Email Print

Reduction of abdominal fat accumulation in rats by 8-week ingestion of a newly developed sweetener made from high fructose corn syrup

Iida, Tetsuo; Yamada, Takako ; Hayashi, Noriko; Okuma, Kazuhiro; Izumori, Ken; et al. **Food chemistry** 138.2-3 (Jun 1, 2013): 781-785.

Show duplicate items from other databases

AB

Abstract (summary) [Translate](#)

Many studies have shown that ingestion of high-fructose corn syrup (HFCS) may cause an increase in body weight and abdominal fat. We recently developed a new sweetener containing rare sugars (rare sugar syrup; RSS) by slight isomerization of HFCS. Here, the functional effects of RSS on body weight and abdominal fat, and biochemical parameters in Wistar rats were examined. Rats (n=30) were randomly divided into three groups and maintained for 8-weeks on starch, starch+HFCS (50:50), and starch+RSS (50:50) diets. Rats in the Starch and HFCS groups gained significantly more body weight and abdominal fat than the RSS group. Fasting serum insulin in the RSS group was significantly lower than in the Starch and HFCS groups, although serum glucose in the HFCS and RSS groups was significantly lower than that in the Starch group. Thus, the substitution of HFCS with RSS prevents obesity induced by the consumption of HFCS.

SU

Indexing (details) [Cite](#)

Subject
 abdominal fat;
 blood glucose;
 diet;
 high fructose corn syrup;
 ingestion;
 insulin;
 isomerization;
 obesity;
 rats;
 starch;
 sugars;
 sweeteners

TI

Title
 Reduction of abdominal fat accumulation in rats by 8-week ingestion of a newly developed sweetener made from high fructose corn syrup

AU

Author
 Iida, Tetsuo; Yamada, Takako; Hayashi, Noriko; Okuma, Kazuhiro; Izumori, Ken; Ishii, Reika; Matsuo, Tatsuhiro

LA
 DTYPE
 PUB, JN
 SRC
 VO
 ISS
 PG
 PCT

Language
 English

Document type
 Journal Article

Publication title
 Food chemistry.

Source details
 Food chemistry., vol. 138, no. 2-3, pp. 781-785, 1 June 2013

Volume
 138

Issue
 2-3

Pagination
 781-785

Page count
 5

ISSN
 0308-8146

Notes
 Food chemistry. 2013 June 1, v. 138, no. 2-3 Elsevier Ltd

Publication date
 Jun 1, 2013

Date revised
 2013-08-01

Source attribution
 National Agricultural Library

Accession number
 IND500606448

Document URL
<http://search.proquest.com/professional/docview/1420134089?accountid=137296>

First available
 2013-08-14

Updates
 2013-08-14

Database
 AGRICOLA (1970 - current)

ISSN
 NT
 PD
 DREV

AN

FAV
 UD

SEARCH FIELDS

You can use field codes on the Basic Search, Advanced Search, and Command Line Search pages to limit searches to specific fields. The table below lists the field codes for this file.

Field Name	Field Code	Example	Description and Notes
Abstract	AB	ab("body weight" and sweetener)	Use adjacency and/or Boolean operators to narrow search results.
Abstract present	ABANY	"wistar rats" and abany(yes)	Add: <i>AND ABANY(YES)</i> to a query to limit retrieval to records with abstracts.
Accession number	AN	an(ind500606448)	A unique document identification number assigned by the information provider. A record can display multiple accession numbers – depending on the products within which it is stored.
All fields + text	--	"corn syrup" and rats	searches all fields. Use proximity and/or Boolean operators to narrow search results.
Alternate title	OTI	oti("mechanisierung in der futter und tierproduktion")	Usually the document title in the original language. See also Document title.
Author	AU	au("smith, mary")	Includes all authors. See also First author.
Conference information	CF	cf("forest fires") cf(kos) cf(greece) cf(2012)	
Corporate author	CA	ca("new york botanical gardens")	
Date revised	DREV	drev(>20130731)	Date that the Information provider revised the record.
Document title	TI	ti(fat P/5 rats)	Includes Alternate (OTI) and Sub-title (STIO), but not Publication title (PUB).
Title only	TIO	tio(grain)	Searches only the Title, not Subtitle or Alternate Title.
Document type	DTYPE	dtype("journal article")	
Edition	EN	en("new hampshire")	

Field Name	Field Code	Example	Description and Notes
First author	FAU	fau("jones, chris")	First name listed in Author field. It is included in Author browse, but its position cannot be specified in the Author browse. See also Author.
First available	FAV	fav(20130814) fav(2013-08-14) fav(>20121231) fav(20130101-20130830)	Indicates the first time a document was loaded in a specific database on PQD. It will not change however many times the record is subsequently reloaded, as long as the accession number does not change.
From database ¹	FDB	ti(banana and virus) and fdb(agricolaprof) ti(banana and virus) and fdb(10000196)	Useful in multi-file searches to isolate records from a single file. FDB cannot be searched on its own; specify at least one search term then AND it with FDB.
Holding library	HL	hl("dnal 1")	Holding library codes are searchable but do not currently display in records.
Identifier (keyword)	IF, SU	if("campo-ma'an")	
ISBN	ISBN	isbn(9789740323)	
ISSN	ISSN	issn(03088146) issn(0308-8146)	Also retrieves electronic ISSNs.
Issue	ISS	iss(2-3)	Also searchable via the Look Up Citation tool.
Journal title	JN	jn("food chemistry")	Journal names only. For all Publication name types, use PUB. Displays in Publication title. Also searchable via the Look Up Citation tool for Publication name.
Language	LA	la(english)	
Language of abstract	SL	sl(english)	
Monograph title	MT	mt("rural development in asia")	
Notes	NT	nt(elsevier*)	
Page count	PCT	pct(5)	
Pagination	PG	pg(781)	See also Start page.

Field Name	Field Code	Example	Description and Notes
Publication date	PD	pd(20130601) pd(2013-06-01) pd(>20130531) pd(20120701-20120731)	Also searchable via the Look Up Citation tool.
Publication title	PUB	pub("food chemistry")	Title of publication where document originally appeared. Also searchable via the Look Up Citation tool.
Publication type	PT, STYPE	pt("scholarly journals")	
Publication year	YR, PY	yr(2012) yr(>2011) yr(2011-2012)	Single year or a range of years may be searched. Displays in Publication date.
Publisher	PB	pb("springer verlag")	
Publisher location	PBLOC	pbloc(oxford)	
Series title	SR	sr("nutraceutical science")	
Source type	PT, STYPE	pt("scholarly journals")	Searches references cited in the original document.
Start page	PAGE	page(781)	Also searchable on the Look Up Citation page. Displays in Pagination.
Subject heading (all)	SU	su("high fructose corn syrup") su(diet)	Descriptor terms describing the subject matter of the original record.
Updates	UD	ud(>20121231) ud(20130101-20130630)	The date(s) the record was loaded as a result of an update provided by the supplier.
Volume	VO	vo(138)	

¹ Click the "Field codes" hyperlink at the top right of the Advanced Search page. Click "Search syntax and field codes", then click on "FDB command" to get a list of database names and codes that can be searched with FDB.

SEARCH TOOLS

Field codes may be used in searches entered on the Basic Search, Advanced Search and Command Line Search pages. The tools available for searching are [Search Fields](#), [Limit Options](#), [Browse Fields](#), [“Narrow Results By” Limiters](#), and [Look Up Citation](#). Each is listed separately below. Some data can be searched using more than one tool.

LIMIT OPTIONS

Limit options are quick and easy ways of searching certain common concepts. Check boxes are available for:

Peer reviewed, Scholarly journals

Short lists of choices are available for:

Source type, Document type and Language

Date limiters are available in which you can select single dates or ranges for date of **publication** and **updated**.

BROWSE FIELDS

You can browse the contents of certain fields by using Look Up lists. These are particularly useful to validate spellings or the presence of specific data. Terms found in the course of browsing may be selected and automatically added to the Advanced Search form. Look up lists are available in the fields drop-down for

Author, Publication title, Subject heading (all)

“NARROW RESULTS BY” LIMITERS

When results of a search are presented, the results display is accompanied by a list of “Narrow results by” options shown on the right-hand panel. Click on any of these options and you will see a ranked list showing the most frequently occurring terms in your results. Click on the term to apply it to (“narrow”) your search results. Narrow results by limiters in this database include:

Peer reviewed, Scholarly journals, Source type, Publication title, Document type, Subject, Language, Publication date.

LOOK UP CITATION

If you need to trace a particular bibliographic reference, use the Look Up Citation feature. Find a link to this toward the top left of the Advanced Search page, or in the drop list under Advanced on any search form; click this and you will go to a page where you can enter any known details of the citation, including: Document title, Author, Publication title, ISSN, ISBN, Volume, Issue, Page, Publication date, DOI.

Terms & Conditions

The contents of the AGRICOLA Database are compiled from a variety of United States Government, foreign government, and non-government sources. Many of the materials contained within the Database have been copyrighted by these other sources, who have granted the National Agricultural Library (NAL) of the United States Department of Agriculture permission to include their copyrighted materials in the Database. You are responsible for complying with all applicable copyright, export control or other laws that may affect your use of any information contained within the Database. Records originating with the National Agricultural Library are copyrighted outside the U.S.A.

The Database is licensed "as is" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161
USA

[Dialog Standard Terms & Conditions](#) apply.