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To use Document (Basic) Search on FSTA, be sure that you have selected FSTA here.

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Your default option for searching is **Topic**, which searches for your term in records' title, abstract and subject heading fields. If you pull down the menu, you also have 15 other search field choices, like **Title, Author/Inventor, Publication Name,** or **Patent Assignee.**

DOCUMENTS | RESEARCHERS

Search in: FSTA® - the food science resource ⌄

DOCUMENTS

Topic ⌃

Search

Topic
Title
Author/Inventor
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Abstract

Topic
Searches title, abstract, author keywords, and Ke...

Example:
robot*
control*
"input shaping"

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Build a search

Connect different forms of your term with the Boolean search operator **OR.**

Connect each concept with the search operator **AND.**

Topic	⌄	chocolate OR cacoa OR cocoa
And ⌄	Topic ⌄	sensory OR texture
And ⌄	Topic ⌄	"3d print*"

+ Add row   + Add date range   Advanced Search

Type each concept in a separate row.

Add rows here.

By using truncation (*) and typing "3D print*" as a phrase inside quotation marks, you will get results with 3D print, 3D prints, 3D printer, 3D printed and 3D printing.
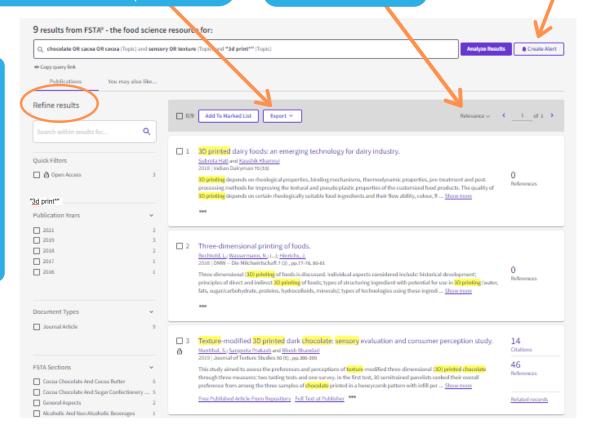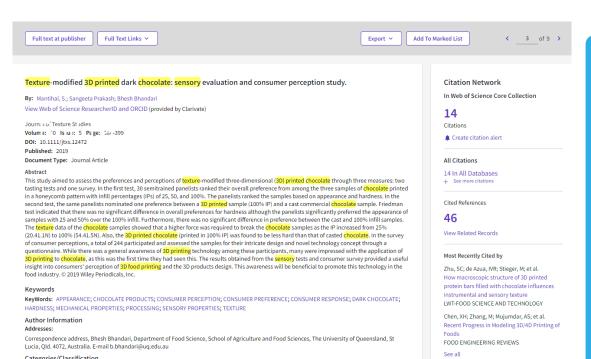
The results

You can export records to reference management software, email, etc., or save up to 50 Marked Lists containing up to 50,000 records per list.

Sort results by Relevance (default), Date, Citations, Usage, Recently Added, First Author, or Publication Title.

Click **Create Alert** to save your search statement as a search alert.

Refine Results lets you search within your result list or filter by limits, including document type, open access, and FSTA Section.

9 results from FSTA® - the food science resource for:

chocolate OR cacoa OR cocoa (Topic) and sensory OR texture (Topic) and "3d print*" (Topic)

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"3d print*"

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☐ General Aspects 2
☐ Alcoholic And Non Alcoholic Beverages 1

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☐ 1 3D printed dairy foods: an emerging technology for dairy industry.
Subrota Hati and Kaushik Khamrui
2018 | Indian Dairyman 70 (10)
3D printing depends on rheological properties, binding mechanisms, thermodynamic properties, pre-treatment and post-processing methods for improving the textural and pseudo plastic properties of the customized food products. The quality of 3D printing depends on certain rheologically suitable food ingredients and their flow ability, colour, fl ... Show more
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☐ 2 Three-dimensional printing of foods.
Bechtold, L; Wassermann, N.; [...]; Hinrichs, J.
2016 | DMW – Die Milchwirtschaft 7 (5), pp.77-78, 80-81
Three-dimensional (3D) printing of foods is discussed. Individual aspects considered include: historical development; principles of direct and indirect 3D printing of foods; types of structuring ingredient with potential for use in 3D printing (water, fats, sugar/carbohydrate, proteins, hydrocolloids, minerals); types of technologies using these ingredi ... Show more
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☐ 3 Texture-modified 3D printed dark chocolate: sensory evaluation and consumer perception study.
Mantihal, S.; Sangeeta Prakash and Bhesh Bhandari
2019 | Journal of Texture Studies 50 (5), pp.386-399
This study aimed to assess the preferences and perceptions of texture-modified three-dimensional (3D) printed chocolate through three measures: two tasting tests and one survey. In the first test, 30 semitrained panelists ranked their overall preference from among the three samples of chocolate printed in a honeycomb pattern with infill per ... Show more
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By: Mantihal, S.; Sangeeta Prakash; Bhesh Bhandari

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Journal of Texture Studies
Volume: 70 Issue: 5 Page: 386-399
DOI: 10.1111/jtxs.12472
Published: 2019
Document Type: Journal Article

Abstract

This study aimed to assess the preferences and perceptions of texture-modified three-dimensional (3D) printed chocolate through three measures: two tasting tests and one survey. In the first test, 30 semitrained panelists ranked their overall preference from among the three samples of chocolate printed in a honeycomb pattern with infill percentages (IPs) of 25, 50, and 100%. The panelists ranked the samples based on appearance and hardness. In the second test, the same panelists nominated one preference between a 3D printed sample (100% IP) and a cast commercial chocolate sample. Friedman test indicated that there was no significant difference in overall preferences for hardness although the panelists significantly preferred the appearance of samples with 25 and 50% over the 100% infill. Furthermore, there was no significant difference in preference between the cast and 100% infill samples. The texture data of the chocolate samples showed that a higher force was required to break the chocolate samples as the IP increased from 25% (20.41.1N) to 100% (54.41.5N). Also, the 3D printed chocolate (printed in 100% IP) was found to be less hard than that of casted chocolate. In the survey of consumer perceptions, a total of 244 participated and assessed the samples for their intricate design and novel technology concept through a questionnaire. While there was a general awareness of 3D printing technology among these participants, many were impressed with the application of 3D printing to chocolate, as this was the first time they had seen this. The results obtained from the sensory tests and consumer survey provided a useful insight into consumers' perception of 3D food printing and the 3D products design. This awareness will be beneficial to promote this technology in the food industry. © 2019 Wiley Periodicals, Inc.

Keywords

KeyWords: APPEARANCE; CHOCOLATE PRODUCTS; CONSUMER PERCEPTION; CONSUMER PREFERENCE; CONSUMER RESPONSE; DARK CHOCOLATE; HARDNESS; MECHANICAL PROPERTIES; PROCESSING; SENSORY PROPERTIES; TEXTURE

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