

# **IDEAS FOR RESEARCH PROJECTS**

## **FOOD SCIENCE AND NUTRITION**

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TAFESA**

Google it!

<http://www.sciencebuddies.org/science-fair-projects/Intro-Cooking-Food-Science.shtml>



## Cooking & Food Science Fair Project Ideas



Who doesn't love food? It's fun to make, it's fun to eat, it's fun to ...study? That's right! There is a lot of science that goes into the everyday foods that you love. Explore questions such as how baking ingredients work, how and why certain ingredients work together, and why people's tastes differ.

Get cooking with these science fair project ideas.

Please select from the following difficulty levels:

Beginner

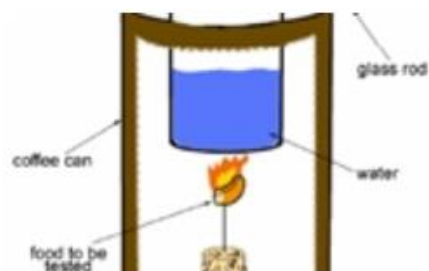
Intermediate

Advanced

Free Cooking & Food Science Fair Project Ideas

## Burning Calories: How Much Energy is Stored in Different Types of Food? Buy Kit

Science Fair Project Idea **Advanced**  EASY   



Have you ever wondered how nutritionists know how many Calories a certain food contains? In this project you will learn a method for measuring how many Calories (how much chemical energy) is available in different types of food. You will build your own calorimeter to capture the energy released by burning a small food item, like a nut or a piece of popcorn. This project gives a new meaning to the phrase "burning calories!"

[Read more](#)

+ More Details

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## Chemistry of Ice-Cream Making: Lowering the Freezing Point of Water Buy Kit

Science Fair Project Idea **Advanced**  EASY   



Have you ever made your own ice cream? If you have, you probably surrounded the ice cream container with ice and rock salt to get the mixture cold enough to freeze. But why does that work? How does adding salt (or other substances) affect the freezing point of water? Find out with this ice-cold science project. [Read more](#)

## Do Oranges Lose or Gain Vitamin C After Being Picked? Buy Kit

Science Fair Project Idea **Advanced**  EASY   



Are oranges highest in vitamin C when they are fresh from the tree (or, in a pinch, the grocery shelf)? Does the amount of vitamin C in an orange change over time, after it has been picked? In this science project, you will find answers to these questions by measuring the amount of vitamin C in a solution using an iodine titration method. [Read more](#)

+ More Details

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## From Bitter to Sweet: How Sugar Content Changes in Ripening Fruit

Science Fair Project Idea **Advanced**  EASY  



You have most likely witnessed the change that occurs as a banana ripens. It changes from green and relatively hard to yellow and soft. The flavor also changes, from bitter to sweet. What happens during ripening? One big change is the increase in sugar content. In this food science fair project, you will measure how the sugar content of a banana changes as it ripens. [Read more](#)



## Get Saucy with the Thickening Power of Starches \*

Science Fair Project Idea **Advanced** 📊 EASY ❤️ 🔄

Who doesn't love soaking up the last bit of gravy on Thanksgiving? Or dipping a crusty cube of bread into a cheese fondue? Or scooping up the thick juices from a fruit pie? Sauces make eating a joy! They provide concentrated flavor in a thickened liquid form, with a pleasing texture and consistency that carries or compliments the flavor of the rest of the food. No matter if they're salty, spicy, savory, or sweet, sauces make foods richer and more special. There are many ways to thicken sauces,... [Read more](#)

**+ More Details**

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## Hey, Do You C My Potatoes? Determining Vitamin C Amounts in Cooked Potatoes \*

 [Buy Kit](#)

Science Fair Project Idea **Advanced** 📊 EASY ❤️ 🔄 🌱



As you know, vegetables not only taste good, but they are good for you. Many vegetables are a great source of vitamin C. Vitamin C is a water-soluble antioxidant that plays an important role in protecting the body from infection and disease. Humans do not make vitamin C on their own, so we must get it from dietary sources. Potatoes, like the ones shown in Figure 1, below, are one good source of vitamin C. Does cooking them affect how much vitamin C they have? In other words, if you boil a... [Read more](#)

## How Much Fat is in Your Food?

Science Fair Project Idea **Advanced** 📊 EASY ❤️ 🌀



Have you ever been told to avoid certain foods because they contain too much fat? Almost every food we eat has some amount of fat in it; often in an invisible form so we do not even notice. However, eating healthy does not mean getting rid of all fat in your diet. On the contrary, fat is an essential nutrient for your body! Only consuming too much of certain fat types creates problems. Are you curious about how to determine the fat content of different foods? Gather some chips, chocolate, and... [Read more](#)

+ More Details

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## Steamy Standing Time: How Food Size Impacts Carryover Cooking \*

Science Fair Project Idea **Advanced** 📊 EASY ❤️ 🌀



"What? My food needs some standing time? How can food stand? I don't see any legs on those baked potatoes!" Whether you're using a traditional oven or a microwave, standing time is an important concept in cooking or baking. When you remove a food from an oven or a microwave, the food retains heat and continues to cook for several minutes after it has been removed from the heat source. This process of the food continuing to cook, using the retained heat in the food itself, is called carryover... [Read more](#)



Check out  
YouTube



Design  
your own  
taste tests



## ***NUTRITION INFORMATION PANELS***

| <b>NUTRITION INFORMATION</b>  |                         |                       |
|---|-------------------------|-----------------------|
| Servings per package: 3   |                         |                       |
| Serving size: 150g  |                         |                       |
|   | Quantity<br>per serving | Quantity<br>per 100 g |
| Energy  | 608 kJ                  | 405 kJ                |
| Protein   | 4.2 g                   | 2.8 g                 |
| Fat, total  | 7.4 g                   | 4.9 g                 |
| — saturated   | 4.5 g                   | 3.0 g                 |
| Carbohydrate, total   | 18.6 g                  | 12.4 g                |
| — sugars  | 18.6 g                  | 12.4 g                |
| Sodium  | 90 mg                   | 60 mg                 |
| Ingredients: Whole milk, concentrated skim milk, sugar, banana (8%), strawberry (6%), grape (4%), peach (2%), pineapple (2%), gelatine, culture, thickener (1442) |                         |                       |
| All quantities above are averages   |                         |                       |

**Look for hidden ingredients. Do salty foods taste salty? Are fat-rich foods fatty?**

**How much strawberry is in my “STRAWBERRY PACKED” dessert?**

**Why do the total weights of protein, fat, carbs and sodium add up to more/less than 100%?**





## **DOES NATURAL MEAN HEALTHY?**

**ALMOST** half of foods promoted as natural are unhealthy, a supermarket study has found. Researchers analysing the nutritional quality of products featuring natural claims discovered almost five in 10 were high in saturated fat, sugar or salt.

**EXCESS CONSUMPTION**



**MAY HAVE LAXATIVE EFFECT**

memegenerator.net



NUTRITIVE SWEETENER), SOY LECITHIN, CITRIC ACID.  
CONTAINS SOYBEAN INGREDIENTS. 68509003

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**EXCESS CONSUMPTION MAY CAUSE A LAXATIVE EFFECT  
(DUE TO MALTITOL SYRUP, ISOMALT AND SORBITOL)**

PILLSBURY, THE BARRELHEAD LOGO AND THE  
DOUGHBOY CHARACTER ARE TRADEMARKS OF THE  
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### Easy To Use

- Store unopened can on kitchen shelf;  
avoid warm places like over an oven.






**Why aren't all treats made like this?**  
**How are they made?**






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2017 ▼

## Bachelor of Food and Nutrition Science

 **Campus**  
[North Terrace](#)  
[Campus](#)  
[Waite](#)  
[Campus](#)  
Regency Park

 **Degree Type**  
Bachelor

 **Duration**  
3 years full-  
time  
or [part-time](#)   
equiv.

 **SATAC Code**  
314761

 **CRICOS**  
068797G

This program provides students with skills and knowledge in food science and human nutrition. Students will learn how to design, formulate, produce and package everyday and specialty foods with specific functional and nutritional properties. They will learn the importance of developing a sustainable, nutritious and healthy food supply and complete a placement in the food industry or a nutrition/health related organisation. A pre-dietetics pathway is included in the program.

### Open Day 2016



#### [Open Day](#)

The University of Adelaide Open Day is on Sunday 14 August at the North Terrace campus from 9am to 4pm.



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# Food & Beverage

## Food Technology

### Study Areas

Agriculture & Science

Arts & Design

Building & Furnishing

Business & Marketing

Community & Health

Education & Languages

Electrical & Electronics

🏠 > Courses > Food & Beverage > Food Technology > Diploma of Food Science and Technology

## Diploma of Food Science and Technology

2016 start

Duration

Up to 12 months Full Time or Part Time equivalent

National Code

FDF50311

TAFE SA Code

TP00350

Course Type

Training Package Qualification