

DESSERTS

Take a seat upstairs at the FAT Diner and savour the daily menu of demonstrations and interactive explorations of FAT — from bioenergetics and burning to flexible lipids and solid saturates. Served every half-hour, seating is limited.



Blubber Bowl

Dip your fingers into this dish of ice and lard to experience the effect of fat as an insulator for the warm-blooded mammal in you.

WAT about BAT

Take a microscopic look to find out what is WAT. Learn about the function of brown and white adipose tissue, thermogenesis and energy stores.

Milk and Soap

Investigate the hydrophobic nature of fatty acids and see an emulsion manifest in an explosion of colour on a plate.

Powerhouse

A serving of mitochondria burning up different fats and sugars (limited availability).

The Melting Pot

Saturate your mind with melting, mixing, freezing and thawing an array of fats to find out all about the melting points, structure and appearance of fats.

Fat—Sweet—Fat

Do you have a sweet tooth or a love for lipids? Try this simple test to demonstrate fat in the food you crave.

Flaming Fat

Discover the link between whale fat and candle wax, then see for yourself how long different fats burn for and why by replacing wax with lipids, lards and oils.

Tuesday Night Bites

Reserve a seat at a weekly curated event in the FAT Diner with invited guest chefs, dietitians, scientists and artists. Find details for these weekly specials on sciencegallery.com/FAT.

FUEL UP AT FAT: IT'S DELICIOUS

We hope you enjoy the unique experience of FAT: IT'S DELICIOUS, taking you through the good, the bad and the beauty of fat. Our unusual diner tackles the duality of fat, from its vital role in energy production and making donuts delicious, to the formulation of cell membranes and its role in 2.8 million deaths per year due to obesity-related diseases.

Whether it's a chance to discover your own basal metabolic rate, partake in a simple experiment demonstrating the hydrophobic nature of fats, or donating some of your blood to research on 'sticky platelets', FAT: IT'S DELICIOUS aims to provide you with an insight into this unique and magnificent molecule.

With special thanks to all of our suppliers particularly *safefood* and especially our FAT curators Cliona O'Farrelly, Chair of Comparative Immunology and Luke O'Neill, Director of Trinity Biomedical Sciences Institute.

SUPPLIERS

All of our experiments are prepared to order, and brought to you by our expert mediators, using only the finest ingredients, equipment, and science.

Supported by our partners:

- Trinity College Dublin
- Wellcome Trust
- *safefood*

Trinity Biomedical Sciences Institute:

Juliette Hussey, John Gormley, Noreen Boyle, Aidan Kelly, Aine Kelly, Jennifer Fortune, Richie Porter, Gavin McManus, Quentin Crowley, Cuisle O'Donovan, Emer Guinan

School of Psychology, Trinity College Dublin:

David Hevey
School of Medicine, Trinity College Dublin and Department of Surgery
St. James's Hospital: Joanne Lysaght, Jacintha O'Sullivan, Suzanne Doyle, Vinod Malik

Institute of Food and Health, University College Dublin:

Helen Roche, Aoibheann McMorrow
School of Health and Human Performance, Dublin City University:
Johann Issartel, Ronan Murphy, Laura Twomey

Plastic, Reconstructive and Aesthetic Surgeons:

Margaret O'Donnell, Patricia Eadie
Consultant Endocrinologist,
St. Vincent's Hospital (Obesity Group):
Donal O'Shea

Behavioural Psychologist:

Ruth Yoder
Dublin City Council: Walter O'Malley

Accuscience/ Pharmed, Jeremy Morgan

Biohazardous Materials Facility, Trinity College Dublin

Advanced Microscopy Laboratory, CRANN, Trinity College Dublin

Mitochondrial Unit Cambridge University:

Michael Murphy, Penny Peck
Wellcome Library London (*A Cruel Kindness*)

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16.05.14–29.06.14



FAT

IT'S DELICIOUS

STARTERS

Whet your appetite with our array of FAT-tastic starters. Begin with our specially selected tests that will shed light on everything from your BMI to your blood pressure.



The FAT Platter

5-in-1 starter combo using bioelectrical impedance analysis. Your data contributes to real research on some of the ways our bodies use fat.

What's in the platter?

Weight: Measure your mass in kilograms (kg).

Body Fat %: The amount of body fat as a proportion of your body weight.

Visceral Fat Rating: A rating between 1–59 of the fat that is in the internal abdominal cavity surrounding the vital organs.

Basal Metabolic Rate (BMR): The minimum daily level of energy your body needs to function effectively, when at rest.

Approximately 70% of calories consumed daily are used for BMR.

Body Mass Index (BMI): Index of weight-to-height (kg/metre²) to classify underweight, overweight and obesity.

- Testing time: 5 minutes
- Essential STARTER if you wish to order any of our MAINS

The Pulsation Platter

2-in-1 dish: Your data from a wristband blood pressure monitor will contribute to several research projects, each looking at the different roles of fat in our bodies.

What's in the platter?

Heart Rate (HR): How many times is your heart beating per minute?

Heart rate varies to meet your body's physical needs, including the need to absorb oxygen and excrete carbon dioxide.

Blood Pressure (BP): The pressure on your artery walls, exerted by circulating blood and caused by the pumping action of the heart. During each heartbeat, blood pressure varies between maximum systolic (SYS) and minimum diastolic (DIA) pressure.

- Testing time: 3 minutes
- Recommended STARTER if you wish to order any of our MAINS
- Available at the Bar

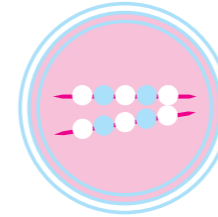
Waist Taste

Fat around your waist contributes more to heart disease, diabetes and certain cancers, than the fat elsewhere in your body. Sample the simplest way to assess whether you may be carrying excess weight around your middle as we measure your waist circumference (WC).

- Testing time: 2 minutes
- Essential Starter if you wish to order Inflammatory Fat from the SPECIALS menu

MAINS

We need your delicious data. When you sample one of our main courses, you're contributing to real scientific research in the fields of immunology, physiology, and neuroscience. Place your order with our mediators and dig in.



Three Piece Suit

Feast your eyes on this bariatric training suit designed to develop skills and techniques for medical staff to manage obese patients. The suit (arms, legs and torso) mimics the proportions, shape and movement of a bariatric patient, allowing the wearer to experience the mobility restrictions such patients experience. Try on the suit and feel the effect of extra weight on your body.

Apple or Pear

What shape are you in? What shape would like to be in? Do you avoid thinking about it? Sink your teeth into discovering how perception of body shape compares to actual BMI and waist circumference.

- Testing time: 7 minutes
- BMI measurement required to order this test

FAT Fingers?

Are you heavy handed? Will your fingers flounder? And is fat at fault? Challenge your fine motor skills and the fluency of your handwriting in this experiment investigating the correlation between speed and accuracy with age, gender and BMI.

- Testing time: 20 minutes
- BMI measurement required to order this test

Activity Addict

Are you a speedy spud or a couch potato? Do you sit, slouch or sleep more than you stand, stroll or sprint? Dip into the International Physical Activity Questionnaire (IPAQ) and contribute to FAT research.

- Testing time: 10 minutes
- Available at the Bar

Your Personal Order

ID Number:

Heart Rate

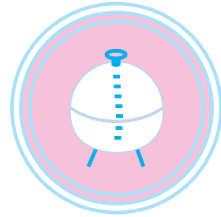
Blood Pressure (DIA)

Blood Pressure (SYS)

Waist Circumference

BUFFET

Help yourself to our 'all-you-can-eat' buffet of exhibits. Dip in and out, and enjoy them at your leisure. This collection of artworks exploring oils, fats, lipids and blubber is the perfect fodder to feed your mind.



Obeast

Savour this series of works from US-based artist Rachel Herrick and the Museum for Obeast Conservation Studies (MOCS), which satirises the fat stigma created and perpetuated throughout culture and the media.

Messages Bag

A handbag created by Susie Freeman and Liz Lee representing the variety of diet pills and other medication used to treat polycystic ovarian syndrome.

Making Soap

Installation by Miami-based artist Orestes De La Paz which explores objectification of the body. This work documents the artist undergoing liposuction surgery and making soap from the fat retrieved.

Pig Heads and Poitín

Installation of animal fat in alcohol, by Michelin star chef Kevin Thornton. Time and temperature controlled, watch this preservation experiment marinate over the course of FAT, then taste the results in a FAT feast finale.

Human Fat in the Larder

An installation featuring human fat removed from a patient who has undergone a 'tummy tuck' surgical procedure.

ATP Synthase

Sculptural representation of an important enzyme within mitochondria which helps generate adenosine triphosphate (ATP) — the energy currency of the cell. Created by artist Colin Rennie.

A Cruel Kindness

A 1967 film made by the British Medical Association and the British Life Assurance Trust for Health Education, UK. Aimed at mothers, it addresses themes about 'puppy fat', genetic determinism, and childhood obesity.

The Lean and Large of It

CT and PET scans highlighting differences in fat distribution between obese and non-obese patients taken as part of studies aiming to outline new obesity cut-off measurements.

Out in the Cold

Maps, medals and medical records from the Dingle-based cold water swimmer Nuala Moore, whose extreme sporting endeavours and achievements prove that you do not have to be thin to be fit.