

# Food Science and Nutrition

**Curriculum Intent:** The preparation and consumption of food offers a sensory experience that is unrivalled. Preparing and sharing cooked dishes is one of the greatest expressions of human creativity, we seek to instil a love of cooking in our students that will open their door to that experience. Learning how to cook is a crucial life skill that enables our students to feed themselves and others affordably and well, now and in later life. Engaging with a Food curriculum enables students to broaden their horizons and offers them a greater understanding of the world in which we live. Students are taught to develop Food knowledge, understanding and skills in preparing for being 21<sup>st</sup> century citizens. The Food curriculums at TSAT are designed to create learning that may lead to career opportunities. Skills and training are a high priority in giving a level of life choices and life chances to the students in the TSAT area. Using creativity and learned skills, students apply their knowledge to solve real and relevant problems within a variety of contexts. Students learn how to take risks, becoming resourceful, creative, imaginative and capable citizens. High-quality Food education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

We share our knowledge of:

- **Food Nutrition** - Develop an understanding of the principles of nutrition and healthy eating to make positive food choices.
- **Food Science** - Develop a scientific understanding of the properties of food and their chemical changes during preparation and cooking.
- **Food Choice & Provenance** - Learning about the principles of 'farm to fork' and provenance whilst demonstrating an understanding of the dietary requirements in different countries, cultures, and cuisines.
- **Food Safety** - Understand the risks involved with the storage, preparation, and cooking of foods, having fun whilst staying safe.

**Cooking with Knowledge and Skill** - Preparing food products and meals in response to individual demands using traditional & contemporary cooking techniques.

Year 12	Year 13
<p><b>Unit 1: Meeting the Nutritional Needs of Specific Groups.</b></p> <p>This mandatory unit will enable the learner to demonstrate an understanding of the science of food safety, nutrition and nutritional needs in a wide range of contexts, and through on-going practical sessions, to gain practical skills to produce quality food items to meet the needs of individuals.</p> <p>It has been designed to offer exciting, interesting experiences that focus learning for 16 - 19 year old learners through applied learning, i.e. through the acquisition of knowledge and understanding in purposeful, work-related contexts, linked to the food production industry.</p> <p>Each unit within the qualification has an applied purpose which acts as a focus for the learning in the unit. The applied purpose demands authentic work related learning in each of the available units. It also requires learners to consider how the use and application of their learning impacts on themselves, other individuals, employers, society and the environment. The applied purpose will also enable learners to learn in such a way that they develop:</p> <ul style="list-style-type: none"> <li>• Skills required for independent learning and development</li> <li>• Skills to ensure their own dietary health and well being</li> <li>• A range of generic and transferable skills</li> <li>• The ability to solve problems</li> </ul>	<p><b>Y13 Level 3 Diploma outline:</b></p> <p>Three units must be completed over the two-year programme (unit one completed in Y12)</p> <p><b>Unit 2 - Ensuring Food is Safe to Eat</b></p> <p>Learners will develop an understanding of hazards and risks in relation to the storage.</p> <p>Preparation and cooking of food in different environments and the control measures needed to minimise these risks. From this understanding, learners will be able to recommend the control measures that need to be in place, in different environments, to ensure that food is safe to eat.</p> <p><b>Assessment:</b></p> <p>This is a mandatory unit and will be externally assessed but completed in 8 hours of lesson time under exam conditions (approximately around May/June). Candidates will have to respond to a scenario set by the exam board, through a written report and practical application.</p> <p><b>Homework:</b></p> <p>Written tasks Questions Scenarios to solve,</p>

- The skills of project based research, development and presentation
- The ability to apply mathematical and ICT skills
- The fundamental ability to work alongside other professionals, in a professional environment
- The ability to apply learning in vocational contexts.

**Assessment:**

50% External assessment - Set by the Examination Board one 90 minute external examination graded Level 3 Pass, Merit and Distinction.

50% Internal assessment – The outcomes of internal assessment will be externally moderated.  
Success at Y12 Level 3 Certificate could lead to further study at Y13 Level 3 Diploma.

**Homework:**

NEA work each week.  
Revision

**Links to careers and personal development include:**

An understanding of food science and nutrition is relevant to many industries and job roles. Care providers and nutritionists in hospitals use this knowledge, as do sports coaches and fitness instructors. Hotels and restaurants, food manufacturers and government agencies also use this understanding to develop menus, food products and policies that support healthy eating initiatives. Many employment opportunities within the field of food science and nutrition are available to graduates. Learners will gain the required knowledge to be able to use the qualification to support entry to higher education courses such as:

- BSc Food and Nutrition
- BSc Human Nutrition
- BSc (Hons) Public Health Nutrition
- BSc (Hons) Food Science and Technology

**Unit 3 - Experimenting to Solve Food Production Problems**

The aim of this unit is for learners to use their understanding of the properties of food in order to plan and carry out experiments. The results of the experiments would be used to propose options to solve food production problems.

**Assessment:**

This is an optional unit which is internally assessed but completed in 12 hours of lesson time under exam conditions (work sample to be submitted for moderation by 15th May). Candidates will have to respond to tasks set by the exam board through written and practical application.

**Homework:**

Write up of practical experiments  
Conclusions of experiments.

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