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| **Emerg Lvl 5****Aeration** | **Fundamental culinary technical skills and theory for emergent practitioner– aeration** |

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| **Kaupae |** Level | 5 |
| **Whiwhinga |** Credit | 10 |
| **Whāinga |** Purpose | The purpose of this skill standard is to provide ākonga with the ability to apply technical knowledge and theory to control the application of biological, chemical, and physical methods to create aerated food products. The learners will also be able to explain the effects of these methods on food products to create a balanced sensory experience. |

**Hua o te ako me Paearu aromatawai |** Learning outcomes and assessment criteria

| **Hua o te ako |** Learning outcomes | **Paearu aromatawai |** Assessment criteria |
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| 1. Assess the biological, chemical, and physical properties affecting aeration of different food ingredients. | 1. Analyse the biological, chemical and physical properties of ingredients that affect sensory characteristics and select and apply appropriate aeration methods.   Ingredients may include but are not limited to: ‒ yeast, baking powder, eggs, flour, sugar. |
| 1. Control the application of biological, chemical, and physical aeration methods to produce food products | 1. Apply technical knowledge of aeration to produce aerated food products that meet quality standards for texture, volume, and colour and sensory expectations. |
| 1. Identify and troubleshoot problems related to aeration, such as poor texture, uneven volume and poor stability | 1. Evaluate the quality of aerated food products, and identify and remediate any issues related to aeration. |
| 1. Apply biological, chemical, and physical aeration processes to produce food products | 1. Apply biological, chemical, or physical aeration processes to produce food products while maintaining food quality. |
| 1. Evaluate the final culinary product and identify methods for improvement in the product and the preparation process. |

**Pārongo aromatawai me te taumata paearu |** Assessment information and grade criteria

*Assessment specifications:*

The context of the learning outcomes of this Skills standard is creating food products for service to guests.

The learning outcomes of this Skills standard are established with the kaupapa of engaging with technical knowledge and theory to progress development of professional practice.

* Evidence of applying biological, chemical, and physical aeration processes to produce at least one food product must be provided, for example, a yeast-based bread, a sponge cake, or an egg foam dessert, and evidence of their approach to aeration, the quality of the final product, and its compliance with health and safety and food safety requirements. This evidence could take the form of photographs, or videos of the production process, and samples of the final product.

Assessment methods may include:

* Observation of practical skills in preparing and producing food products using aeration methods.
* Verbal questioning to assess knowledge and understanding of aeration, as well as food safety and hygiene principles.
* Peer and self-assessment to promote reflection and self-improvement.
* Portfolio assessment to demonstrate evidence of learning, such as recipes, photographs, and reflections on the learning process.

***Ngā momo whiwhinga |*** *Grades available*

Achieved

**Ihirangi waitohu |** Indicative content

The learning outcomes of this skill standard are established with the kaupapa of engaging with technical knowledge and theory to progress development of professional practice.

The principles of kaitiakitanga, manaakitanga, whanaungatanga and kotahitanga are under the rangatiratanga of mana whenua and must underpin all learning in this skill standard.

Learning may cover but is not limited to the following content:

* Applying the theory of temperature and medium control (a deep understanding of the methods of cookery and what is happening with the use of aeration from a food science perspective) to transform appropriate ingredients food products.
* Applying the theory of sensory analysis to allow for the development of sensory balanced food items.
* Scientific principles informing behind the physical and chemical methods used to create aerated food products.
* Different types of aerated food products, such as soufflés, mousses, and cakes, scones, batter, pizza bases.
* Properties of different ingredients and how they interact in aerated food products.
* Understanding of how different biological, chemical, and physical methods affect the texture, flavour, and appearance of aerated food products and the ability to apply that understanding to problem solving in a culinary context.
* Factors that can impact the success of aerated food products, such as temperature, humidity, and timing.

**Rauemi |** Resources

Legislation relevant to this skill standard may include but is not limited to:

* Food Act 2014.
* Health and Safety in Employment Act 2015.

Applicable procedures found in the following:

* establishment performance guidelines and standards
* equipment manufacturer’s procedures and specifications
* Government and local body legislation

Definitions

* *Sensory expectations* refer to the anticipated experiences and perceptions that individuals have about the sensory aspects of food. These expectations involve the senses of sight, smell, taste, touch, and even hearing.
* *Technical knowledge* in this context covers the practice of controlling the application of biological, chemical and physical methods of aeration to achieve aerated food products with sensory balance. Technical knowledge includes application of theory.
* *Theory* in this context means an ability to explain the effect of biological, chemical, and physical effects of aeration on food products to create a balanced sensory experience.

**Pārongo Whakaū Kounga |** Quality assurance information

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| **Ngā rōpū whakatau-paerewa |** Standard Setting Body | Ringa Hora Services Workforce Development Council |
| **Whakaritenga Rārangi Paetae Aromatawai |** DASS classification | Service Sector > Hospitality > Cookery |
| **Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga |** CMR | 0112 |

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| **Hātepe |** Process | **Putanga |** Version | **Rā whakaputa |** ReviewDate | **Rā whakamutunga mō te aromatawai |** Last date for assessment |
| **Rēhitatanga |** Registration | <type here> | [dd mm yyyy] | [dd mm yyyy] |
| **Arotakenga |** Review | <type here> | [dd mm yyyy] | [dd mm yyyy] |
| **Kōrero whakakapinga |** Replacement information | N/A | | |
| **Rā arotake |** Planned review date | [dd mm yyyy] | | |

Please contact Ringa Hora Services Workforce Development Council [qualifications@ringahora.nz](mailto:qualifications@ringahora.nz) to suggest changes to the content of this skill standard.