

CONTROL QUALITY OF BEE PRODUCTS

UNIT CODE: 0811 341 08 A

TVET CDACC UNIT CODE: AGR/OS/APIPR/CR/08/4/MA

UNIT DESCRIPTION

This unit specifies the competencies required to control quality of bee products. It involves establishing bee products safety and quality systems, managing quality operations, preparing for raw material and product analyses and carrying out raw material, packaging materials and finished products analyses.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
These describe the key outcomes which make up workplace function.	<p>These are assessable statements which specify the required level of performance for each of the elements.</p> <p><i>Bold and italicized terms are elaborated in the Range</i></p>
1 Establish food safety and quality systems	<ol style="list-style-type: none">1.1 <i>Food safety and quality systems</i> are designed and established as per legal, regulatory requirements and workplace quality manual1.2 Food safety and quality systems are implemented and maintained as per legal, regulatory requirements and workplace quality manual1.3 Food safety and quality records are developed and maintained according to legal and regulatory requirements
2 Manage quality operations	<ol style="list-style-type: none">2.1 Quality operations are planned and executed as per overall workplace plan2.2 Quality operations resources are allocated and controlled as per workplace procedures.2.3 Quality operations are organized as per workplace procedures.2.4 Quality operations are coordinated as per workplace procedures.2.5 Audit of quality operations is carried out based on workplace procedures.
3 Prepare for bee product analyses	<ol style="list-style-type: none">3.1 <i>Laboratory standards</i> are established as per Codex/AOAC/KEBS and workplace quality manual.

ELEMENT These describe the key outcomes which make up workplace function.	PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements. <i>Bold and italicized terms are elaborated in the Range</i>
	<p>3.2 Laboratory standards are implemented based on Codex/AOAC (International laboratory standards) and workplace quality manual.</p> <p>3.3 Laboratory status is confirmed according to laboratory code of practice.</p> <p>3.4 <i>Regulatory and statutory requirements</i> for food laboratory practices are adhered to</p>
4 Carry out bee products analyses	<p>4.1 <i>Sampling procedures</i> are adhered to as per workplace quality manual</p> <p>4.2 Samples are prepared and analyzed based on specific <i>test</i> procedure</p> <p>4.3 Testing reagents are prepared, and equipment calibrated according to specifications</p> <p>4.4 Analyses results are interpreted, reported and appropriate decisions made based on test outcomes and workplace standards.</p>

Range

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

Variable	Range <i>May include but is not limited to:</i>
1. Food safety and quality systems may include but are not limited to:	<ul style="list-style-type: none"> • International standards e.g. FSSC, ISO GFSI PRC, HACCP • National standards e.g. KEBS • Workplace standards
2. Laboratory standards may include but are not limited to:	<ul style="list-style-type: none"> • AOAC/CODEX • National laboratory standards • Workplace laboratory standards • KEBS

Variable	Range <i>May include but is not limited to:</i>
3. Regulatory and statutory requirements may include but are not limited to:	<ul style="list-style-type: none"> • Cap 242 (public health act) • Cap 254 (food, drugs and chemical substances act) • NEMA regulations • OSH Act 2007
4. Sampling procedures may include but are not limited to:	<ul style="list-style-type: none"> • General-Random, Stratified • Workplace • KEBS standards
5. Tests may include but are not limited to:	<ul style="list-style-type: none"> • Miro-biological • Physical • Chemical • Organic • Organoleptic

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit of competency.

Required Skills

The individual needs to demonstrate the following skills:

- Communication
- Interpersonal
- Leadership
- Planning
- Problem solving
- Route cause analysis
- Negotiation
- Interpretation
- Trouble shooting
- Apparatus handling
- Analytical
- Sampling
- Training/facilitation
- Computer

Required Knowledge

The individual needs to demonstrate knowledge of:

- Food chemistry
- Food Analysis
- Food microbiology
- Quality/Safety management Systems
- Quality management
- Pest and rodent control
- Emerging Issues
- Principles of food engineering
- Environmental safety
- Laboratory techniques

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

1. Critical Aspects of Competency	<p>Assessment requires evidence that the candidate:</p> <p>1.1 Demonstrated knowledge of laboratory standards</p> <p>1.2 Demonstrated knowledge of relevant legal, statutory and regulatory requirements.</p> <p>1.3 Adhered to lab code of practice.</p> <p>1.4 Demonstrated knowledge of various sampling techniques.</p> <p>1.5 Demonstrated ability to carry out food lab test/analyses.</p> <p>1.6 Reported and interpreted test results correctly and objectively.</p> <p>1.7 Demonstrated knowledge of various quality and food safety systems.</p>
2. Resource Implications	<p>The following resources should be provided:</p> <p>2.1 Appropriately simulated environment where assessment can take place</p> <p>2.2 Access to relevant workplace assessment environment</p> <p>2.3 Resources relevant to the proposed assessment activity or tasks</p>
3. Methods of Assessment	<p>Competency may be assessed through:</p> <p>3.1 Observation</p>

	<p>3.2 Oral questioning</p> <p>3.3 Projects</p> <p>3.4 Written tests</p> <p>3.5 Third party</p> <p>3.6 Portfolio</p>
4. Context of Assessment	<p>Competency may be assessed:</p> <p>4.1 On-the-job</p> <p>4.2 Off-the –job</p> <p>4.3 During Industrial attachment</p>
5. Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.